SAVA-D900/D900FR/
D900R/SS-T900

SERVICE MANUAL

US Model

Ver 1.2 2002. 06

(Photo : SAVA-D900FR)

(Photo : SAVA-D900)

(Photo : SAVA-D900R)

(Photo : SS-T900)

This set is composed of the following table.

Front Speaker	SAVA-D900FR
Center/Rear Speaker	SS-T900
Woofer Speaker	SAVA-D900R
Main Unit	SAVA-D900

Model Name Using Similar Mechanism	NEW
Mechanism Type	CDM53J-DVBU1
Base Unit Type	DVBU1
Optical Pick-up Type	KHM-220AAA

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads, both channels driven, from 200 – 20 kHz; rated 23 watts per channel minimum RMS power, with no more than 0.8% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Stereo channel	20 Hz - 20 kHz, 0.8% THD 25 W × 2 (Front L/R, 8 ohms) + 75 W (Subwoofer, 8 ohms)
Surround channel	20 Hz - 20 kHz, 0.8% THD 25 W (Center, 8 ohms) 25 W × 2 (Rear, 8 ohms)
TOTAL	200 W
Input sensitivity/ Impedance	
TV/ VIDEO/ AUX	450 mV, 45 kohms
CONTROL S	Only for Sony XBR^2 series and Sony Projection TV
Output	
Center speaker	Accepts only supplied SS-T900
Rear speaker	Accepts only supplied SS-T900
Wireless rear speaker	Accepts only Sony model, SA-IF70
R-ch speaker	Accepts only the supplied main unit (right) with supplied exclusive speaker cord
Tone control	Bass: ±8 dB at 100 Hz Treble: ±8 dB at 10 kHz

CD/DVD system

Laser	Semiconductor laser (λ=780nm) Emission duration: continuous
Laser output	MAX 44.6μ W * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aparture.
Signal format system	NTSC
Frequency response	DVD (PCM): 2 Hz to 22 kHz (±1.0 dB) CD: 2 Hz to 20 kHz (±1.0 dB)
Signal-to-noise ratio	More than 80 dB (TV,VIDEO (AUDIO),AUX (AUDIO) connectors only)
Harmonic distortion	Less than 0.03 %

FM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	87.5 - 108.0 MHz (100 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

System	Tuner section: PLL quartz-locked digital synthesizer system
Tuning range	530 - 1710 kHz (10 kHz interval) 531 - 1710 kHz (9 kHz interval)
Antenna	Loop antenna

Video section

Inputs	Video: 1 Vp-p 75 ohms
Outputs	Video: 1 Vp-p 75 ohms S-video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms

Speakers

Type	
Front speaker	
Front:	Bass reflex type, magnetically shielded
Subwoofer:	Advanced SAW type, magnetically shielded
Satellite speaker (SS-T900)	Bass reflex type, magnetically shielded
Speaker unit	
Tweeter:	1 inch (2.5 cm) balanced drive type
Midbass:	4 inches (10 cm) cone type
Subwoofer:	8 inches (20 cm) cone type
Satellite speaker (SS-T900)	
Tweeter:	1 inch (2.5 cm) balanced drive type
Midbass:	3 inches (8 cm) cone type × 2

General

Power requirements	120 V AC, 60 Hz
Power consumption	200 W
Dimensions (approx.)	
Main unit (Left/ Right) including front speaker:	Approx. 12 $^{5}/_{8}$ × 46 × 17 inches (320 × 1167 × 430 mm) (w/h/d excluding speaker base) Approx. 22 $^{3}/_{4}$ × 46 $^{1}/_{2}$ × 21 $^{3}/_{4}$ inches (576 × 1180 × 550 mm) (w/h/d including speaker base)
Satellite speaker (SS-T900)	Approx. 4 $^{1}/_{2}$ × 13 $^{7}/_{8}$ × 5 inches (112 × 352 × 126 mm) (w/h/d including grille net)
Mass	
Main unit (Left) including front speaker:	Approx. 58 Ib 7 oz (26.5 kg) (excluding speaker base) Approx. 63 Ib 15 oz (29.0 kg) (including speaker base)
Main unit (Right) including front speaker:	Approx. 38 Ib 9 oz (17.5 kg) (excluding speaker base) Approx. 44 Ib 1 oz (20.0 kg) (including speaker base)
Satellite speaker (SS-T900)	Approx. 5 Ib 8 oz (2.5 kg)
Operating temperature	41°F to 95°F (5°C to 35°C)
Operating humidity	5 % to 90 %

— Continued on next page —

DVD HOME THEATER
ACTIVE SPEAKER SYSTEM

9-929-278-13
2002F1600-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

Supplied accessories

Unpacking

Check that you have the following items:

- Front speakers (2)
- Main unit (left) (1)
- Main unit (right) (1)
- Satellite speakers SS-T900 (3; one for the center speaker, and two for the rear speakers)
- AM loop antenna (1)
- FM wire antenna (1)
- Main unit L/R connecting cord, 12 ft. (3.5 m) (1)
- Center speaker connecting cord, 8 ft. 2 $^{1}/_{2}$ in. (2.5 m) (1)
- Rear speaker connecting cords, 32 ft. 9 $^{3}/_{4}$ in. (10 m) (2)
- Audio connecting cord, 5 ft. (1.5 m) (1)
- Video connecting cord, 5 ft. (1.5 m) (1)
- Black wood screws (for the mounting brackets) (4)
- Screws (for the speaker bases) (8)
- Foot pads (12)
- Remote commander (remote) RM-PP900 (1)
- Size AA (R6) batteries (2)
- Mounting brackets (2)
- Speaker bases (2)
- Dowels (4)

Optional Wireless speaker system SA-IF70

Design and specifications are subject to change without notice.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

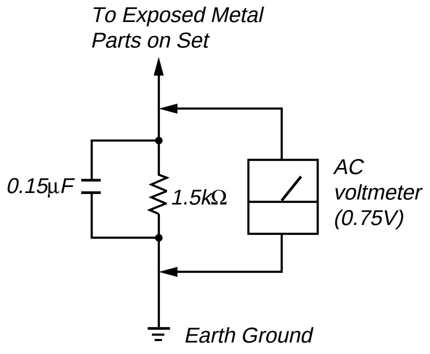

Fig. A. Using an AC voltmeter to check AC leakage.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION-
Laser radiation when open.
DO NOT STARE INTO BEAM.

This caution label is located inside the unit.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output several times.

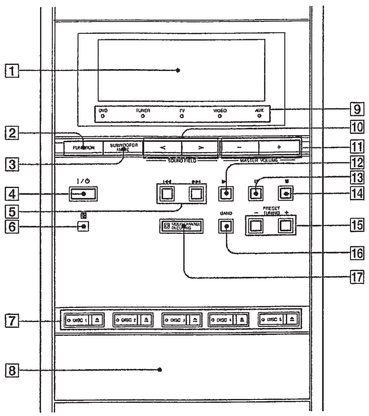
SECTION 1
GENERAL

This section is extracted from instruction manual.

Index to Parts and Controls

Refer to the pages indicated in parentheses for details.

Front Panel



1 **Front Panel Display (33)**
Indicates the playing time, etc.

2 **FUNCTION button (20)**
Selects the component you want to use.

3 **SUBWOOFER MODE button (27)**
Changes between mode 1, 2, and OFF.

4 **I/⏻ (power) switch (14)**
Turns on and off the power of the system.

5 **⏮/⏭ button (21)**
Press to go to the next chapter or track or to go back to the previous chapter or track.

6 **remote sensor (8)**
Accepts the remote control signals.

7 **DISC 1–DISC 5, ≜ buttons and indicators**
DISC 1–DISC 5: Select the disc tray, and start playback (20).
≜: Opens or closes the disc tray (20).
The indicators turn; (21)
- green when the disc tray is chosen, or the disc is being play backed.
- off: when there is no disc.
- orange: when a disc is placed on the disc tray, however, the disc tray is not chosen.

8 **Disc tray (20)**
Place a disc on the tray.

9 **Indicators**
Shows the function mode.

10 **SOUND FIELD </> buttons (22)**
Select the sound field.

11 **MASTER VOLUME +/– buttons (20)**
Adjust the volume.

12 **▷PLAY button (20)**
Plays a disc.

13 **▯▯PAUSE button (21)**
Pauses playing a disc.

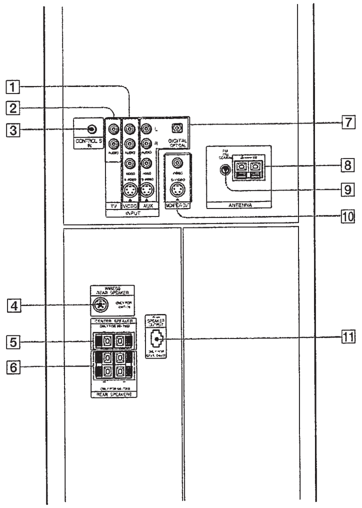
14 **□STOP button (21)**
Stops playing a disc.

15 **PRESET TUNING +/– buttons**
Scan all preset stations.

16 **BAND button**
Selects AM or FM band.

17 **MULTI-CHANNEL DECODING indicator**
Lights when a program source recorded in a multi-channel format is play backed.

Rear Panel



1 **VIDEO connectors (12)**
Connect to a VCR.

2 **TV jacks (11)**
Connect to a TV.

3 **CONTROL S IN jack (12)**
Connects to Sony XBR^2 series TV or Sony Projection TV equipped with a speaker switch.

4 **WIRELESS REAR SPEAKER connector (10)**
Connects to an optional wireless rear speaker transmitter.

5 **CENTER SPEAKER terminals (11)**
Connect to the supplied satellite speaker (center).

6 **REAR SPEAKERS terminals (11)**
Connect to the supplied satellite speakers (rear).

7 **AUX connectors (12)**
Connect to digital satellite receiver with OPTICAL jack, or VCR, LD player, MD deck.

8 **AM loop antenna terminals (12)**
Connect to the supplied AM loop antenna.

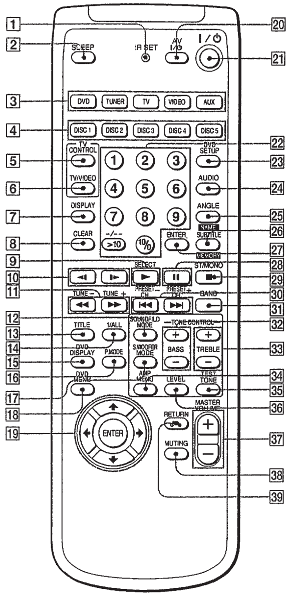
9 **FM 75 Ω COAXIAL wire antenna connector (12)**
Connects to the supplied FM wire antenna.

10 **MONITOR OUT (VIDEO/S VIDEO) connectors (11)**
Connect to a TV monitor.

11 **R-ch SPEAKER OUTPUT connector (11)**
Connects to the supplied front right speaker.

Continued on the next page

Remote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DISC 3
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-/--
>10
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MEMORY
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TUNE –
TUNE +
PRESET –
PRESET +
CH
BAND
TITLE
1/ALL
SOUNDFIELD MODE
TONE CONTROL
DVD DISPLAY
P.MODE
S.WOOFER MODE
BASS
TREBLE
DVD MENU
AMP MENU
LEVEL
TEST TONE
MASTER VOLUME
RETURN
ENTER
MUTING

1 **IR SET button (60)**
Programs the remote with the signals to control non-Sony components.

2 **SLEEP button (65)**
Activates the sleep timer.

3 **Function buttons (59)**
Press one of the buttons to select the component you want to use. When you press a button, the system turns on.

To select	Press
Built-in DVD	DVD
Built-in tuner	TUNER
TV	TV*
VCR	VIDEO**
VCR, MD deck, LD player, digital satellite receiver	AUX***

* Factory setting: Sony TV
** Factory setting: Sony VCR mode 3 (VHS)
*** Factory setting: no setting

See the table on page 63 for information on the buttons you can use to control each component.
Note that the function buttons are factory-set as described in the table. If you want to change the factory setting of the buttons to match your particular components, do the procedure "Operating Sony Components," or "Operating Non-Sony Components" on pages 59-61.

Note
Before you turn on the system, make sure that you have adjusted the volume to minimum using the MASTER VOLUME – button to avoid damaging your speakers.

4 **DISC1–DISC5 buttons**
Select the disc tray, and starts playback.

5 **TV CONTROL button (63)**
Turns on the TV and changes the remote to a TV remote. In this case, the I/⏻, MASTER VOLUME +/–, MUTING buttons work only on the TV, not on the system.

6 **TV/VIDEO button (63)**
Changes the input mode of the TV.

7 **DISPLAY button (33)**
Switches the item displayed on the front panel display. remaining or playing time → DVD or CD TEXT → sound field

8 **CLEAR button**
Aborts the previous selection.

9 **▶PLAY, SELECT button**
▶PLAY: Plays a disc (20).

10 **◀I/I▶ buttons (21)**
Play back the disc in slow motion.

11 **◀◀/▶▶, TUNE +/– buttons**
◀◀/▶▶: Locate a point quickly while monitoring the picture (21).
TUNE +/– : Scan all available radio stations (19).

12 **SOUNDFIELD MODE button (22)**
Selects the sound field.

13 **TITLE button (29)**
Displays the title menu on the TV screen.

14 **1/ALL button (44)**
Selects to playback only 1 disc or all discs.

15 **DVD DISPLAY button (36)**
Displays the Control Menu display on the TV screen to set or adjust the items.

16 **P. MODE button (31)**
Selects program, shuffle or normal play mode.

17 **S.WOOFER MODE button (27)**
Selects the subwoofer mode.

18 **DVD MENU button (29)**
Displays the DVD menu on the TV screen.

19 **←/↑/↓/→, ENTER buttons (29)**
Select and execute the items or settings.

20 **AV I/⏻ (power) switch (63)**
Turns on/off the power of the connected audio and visual component selected by the function button.

21 **I/⏻ (power) switch (20)**
Turns on and off the power of the system.

22 **Number buttons (30)**
Select the items or settings.

23 **DVD SETUP button (49)**
Shows the DVD SETUP menu on the TV screen.

24 **AUDIO button (41)**
Changes the sound while playing a DVD or VIDEO CD.

25 **ANGLE, NAME button**
ANGLE: Changes the angles when playing a DVD (43).
NAME: Inputs name of the preset radio stations (64).

26 **SUBTITLE, MEMORY button**
SUBTITLE: Displays the "SUBTITLE" menu in the Control Menu display (43).
MEMORY: Memorizes preset radio stations (19).

27 **ENTER button (60)**
Executes the items or settings selected using the number buttons.

28 **IIPAUSE button (21)**
Pauses playing a disc.

29 **■STOP, ST/MONO button**
■STOP: Stops playing a disc (21).
ST/MONO: Changes the FM program reception between monaural and stereo (63).

30 **I◀◀/▶▶IPREV/NEXT, PRESET +/–, CH +/– buttons**
I◀◀/▶▶IPREV/NEXT : Press to go to the next chapter or track or to go back to the previous chapter or track (21).
PRESET +/– : Scan all preset stations (19).
CH +/–: Change TV channels (63).

31 **BAND button (19)**
Selects AM or FM band.

32 **TONE CONTROL BASS +/– buttons (27)**
Adjust the bass level.

33 **TONE CONTROL TREBLE +/– buttons (27)**
Adjust the treble level.

34 **AMP MENU button (33)**
Shows the AMP MENU on the front panel display.

35 **TEST TONE button (18)**
Starts/ stops test tone of the speakers.

36 **LEVEL button (18)**
Adjusts the speaker level.

37 **MASTER VOLUME +/– buttons (20)**
Adjust the volume.

38 **MUTING button (21)**
Mutes the sound.

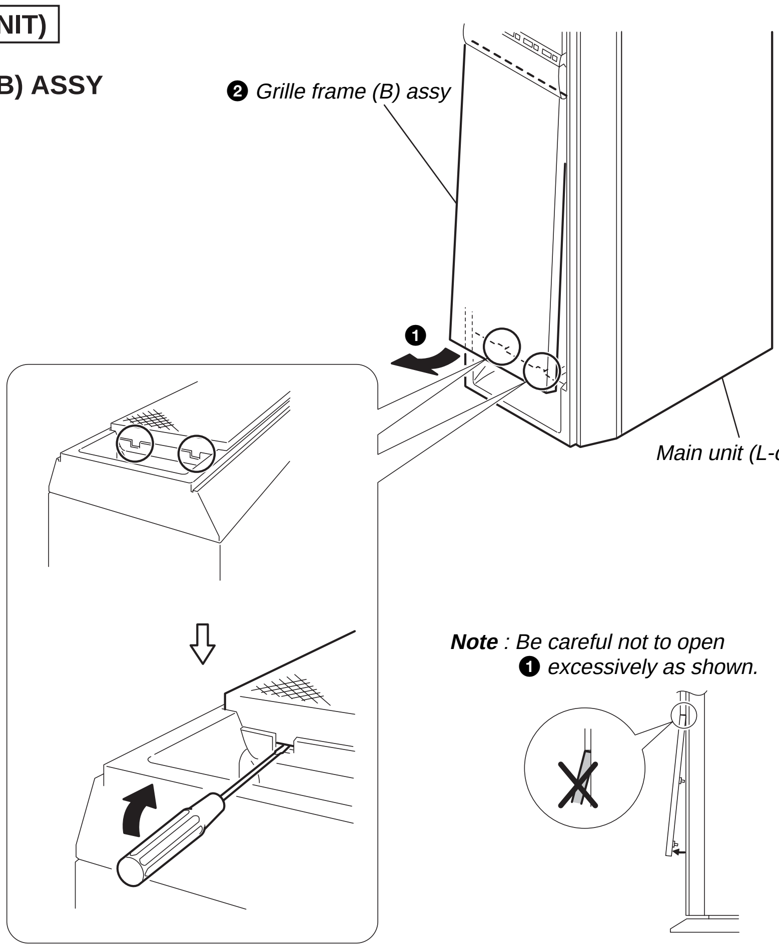
39 **↶RETURN button (30)**
Press to return to the previously selected screen, etc.

SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

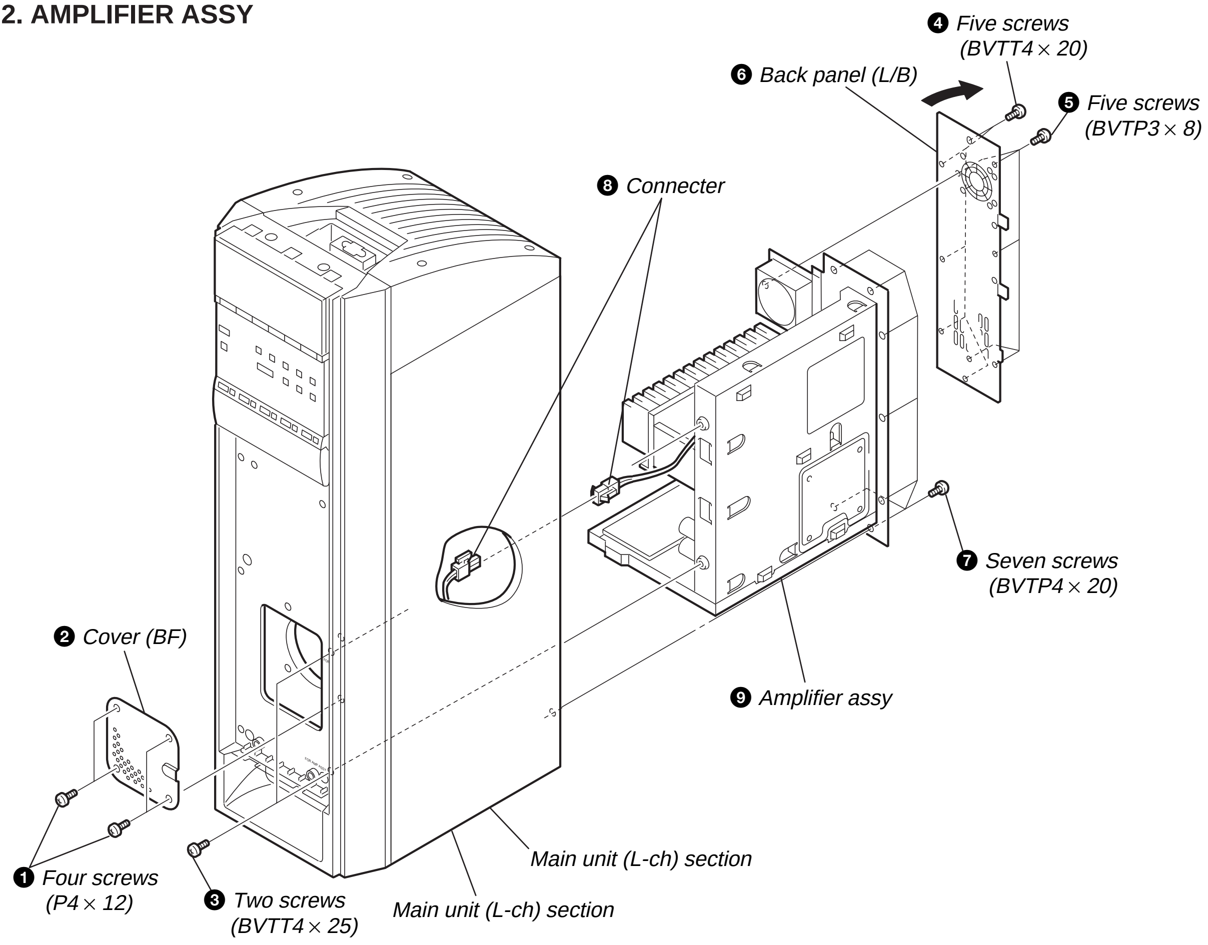
SAVA-D900 (MAIN UNIT)

2-1. GRILLE FRAME (B) ASSY

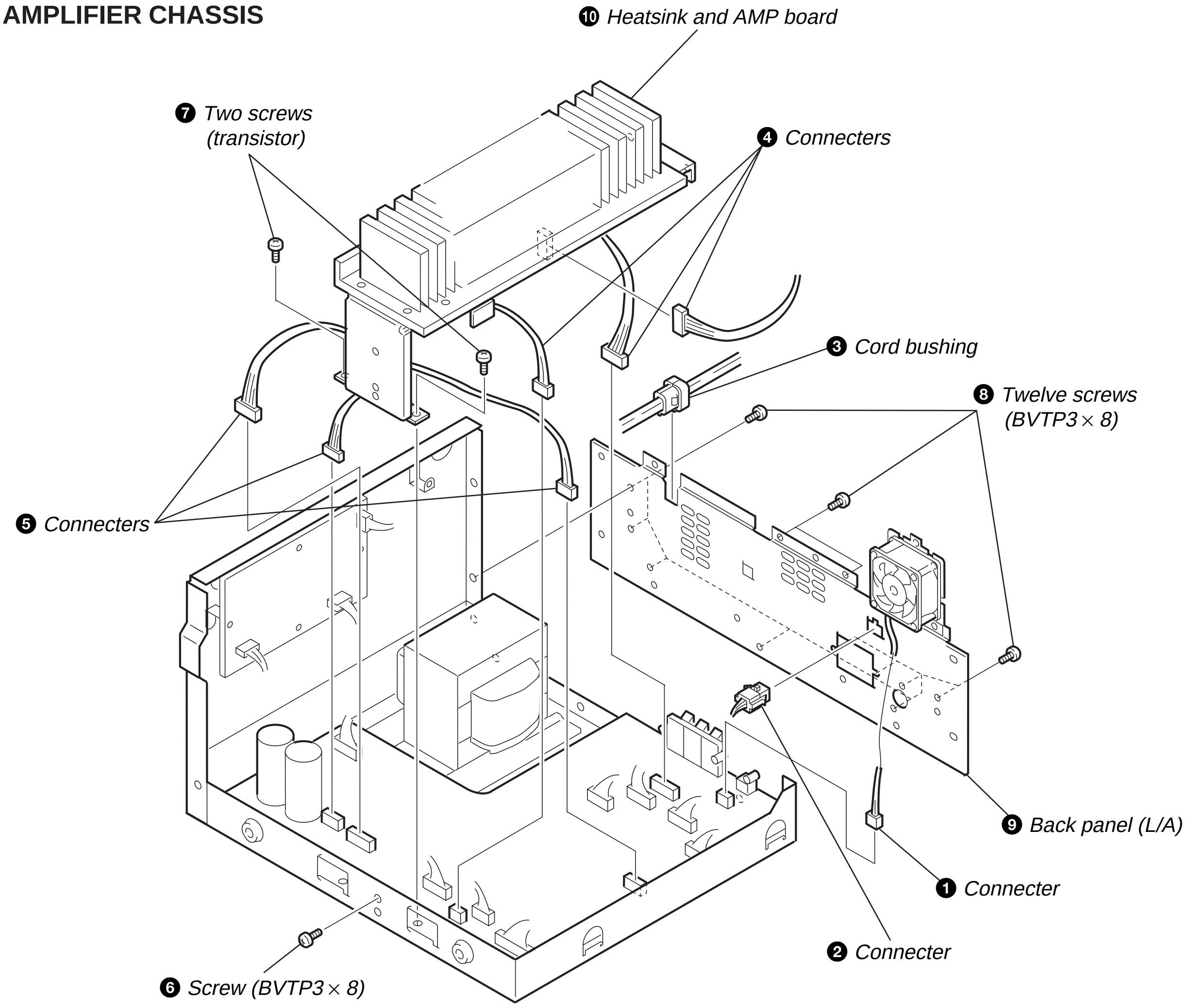

❷ Grille frame (B) assy
❶
Main unit (L-ch) section

Note *: Be careful not to open ❶ excessively as shown.*

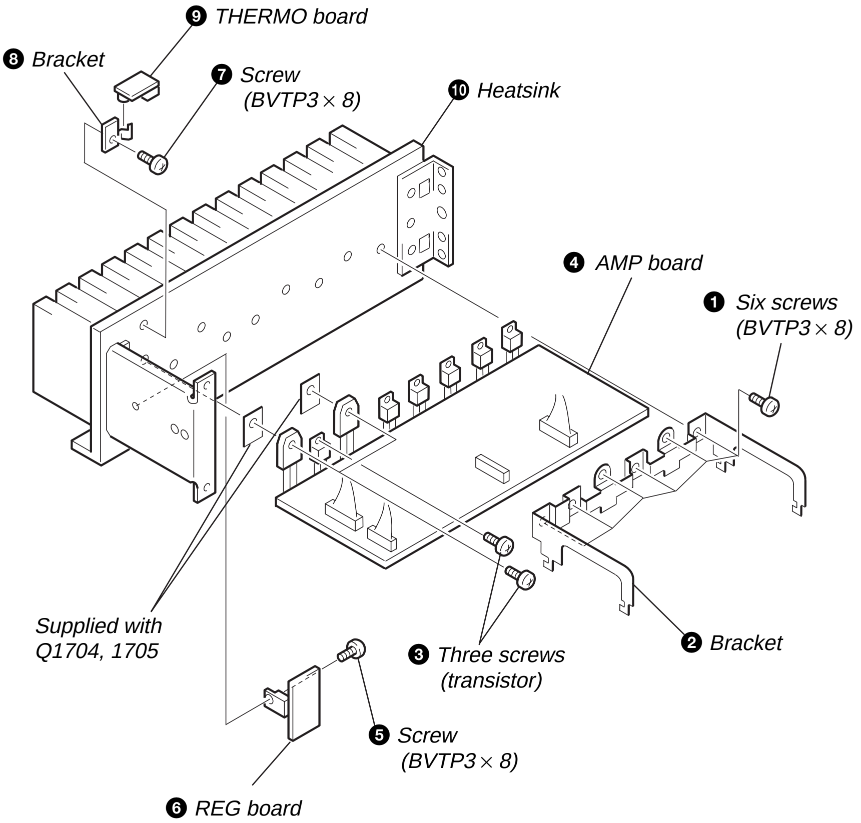
2-2. AMPLIFIER ASSY


❹ Five screws (BVTT4 × 20)
❻ Back panel (L/B)
❺ Five screws (BVTP3 × 8)
❽ Connecter
❼ Seven screws (BVTP4 × 20)
❷ Cover (BF)
❾ Amplifier assy
Main unit (L-ch) section
❶ Four screws (P4 × 12)
❸ Two screws (BVTT4 × 25)
Main unit (L-ch) section

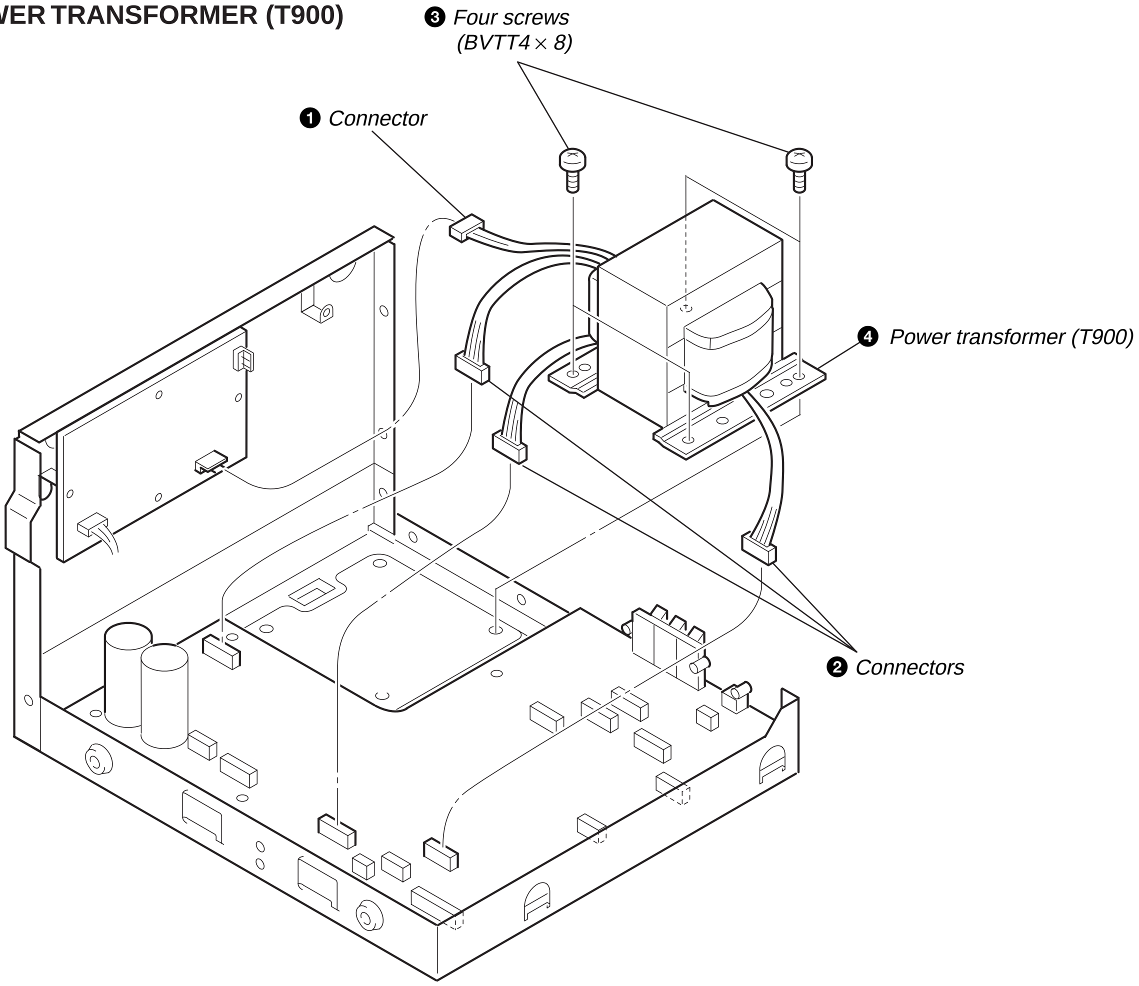
2-3. AMPLIFIER CHASSIS


❿ Heatsink and AMP board
❼ Two screws
(transistor)
❹ Connecters
❸ Cord bushing
❽ Twelve screws
(BVTP3 × 8)
❺ Connecters
❾ Back panel (L/A)
❶ Connecter
❷ Connecter
❻ Screw (BVTP3 × 8)

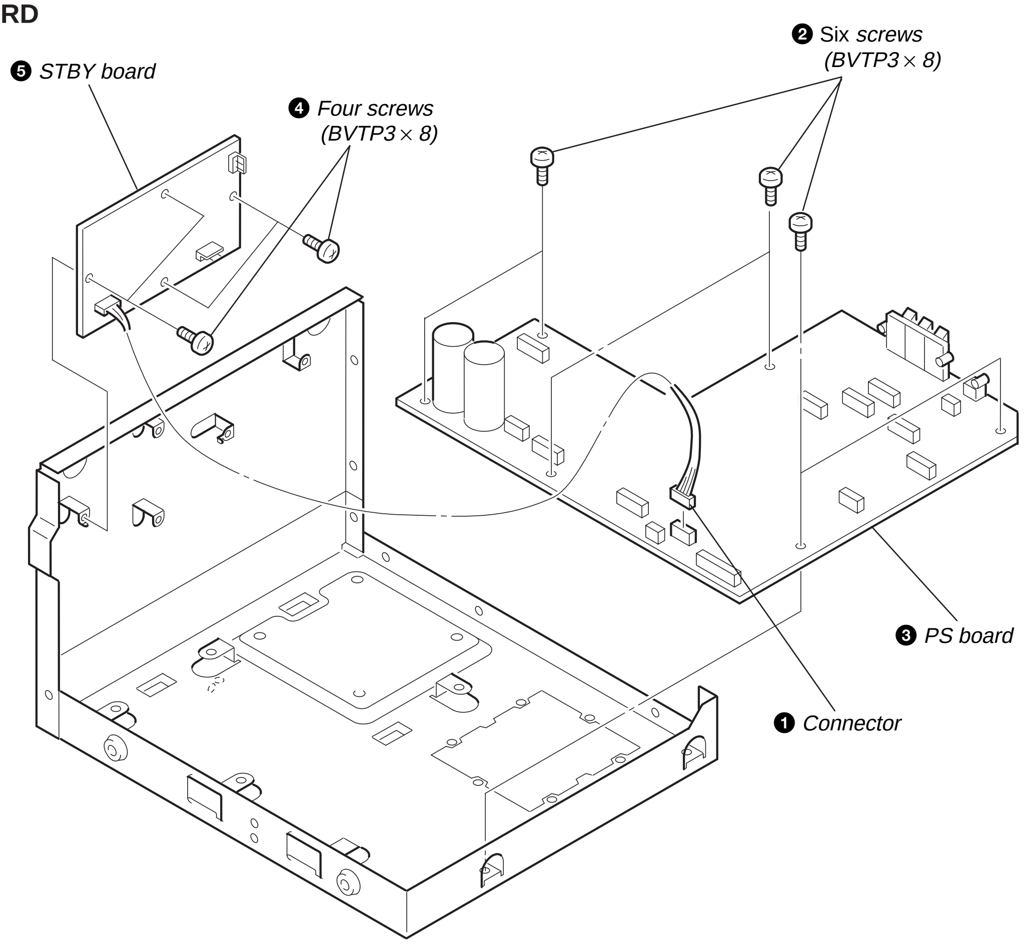
2-4. AMP BOARD


❾ THERMO board
❽ Bracket
❼ Screw
(BVTP3 × 8)
❿ Heatsink
❹ AMP board
❶ Six screws
(BVTP3 × 8)
Supplied with
Q1704, 1705
❸ Three screws
(transistor)
❷ Bracket
❺ Screw
(BVTP3 × 8)
❻ REG board

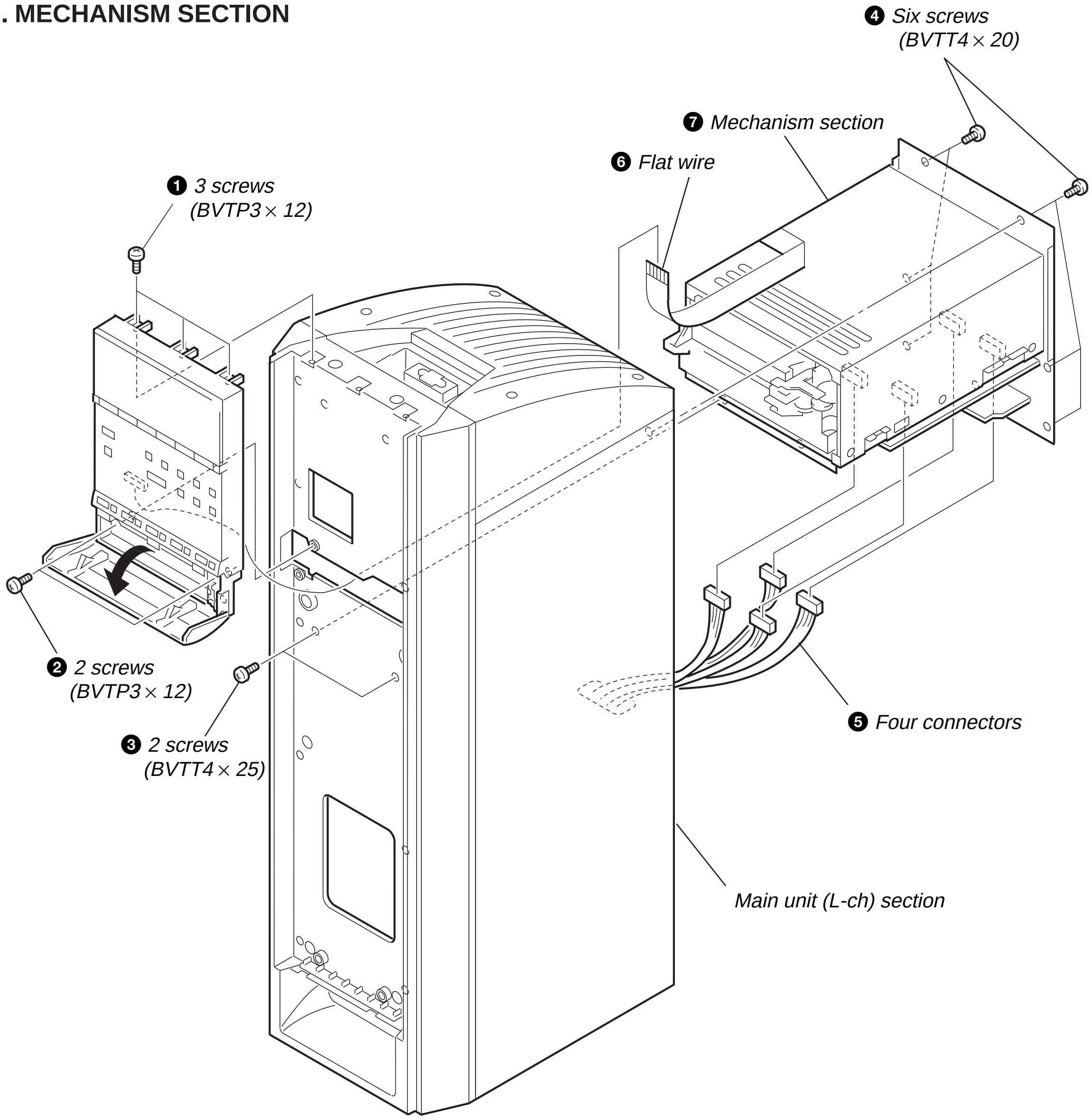
2-5. POWER TRANSFORMER (T900)


❸ Four screws
(BVTT4 × 8)
❶ Connector
❹ Power transformer (T900)
❷ Connectors

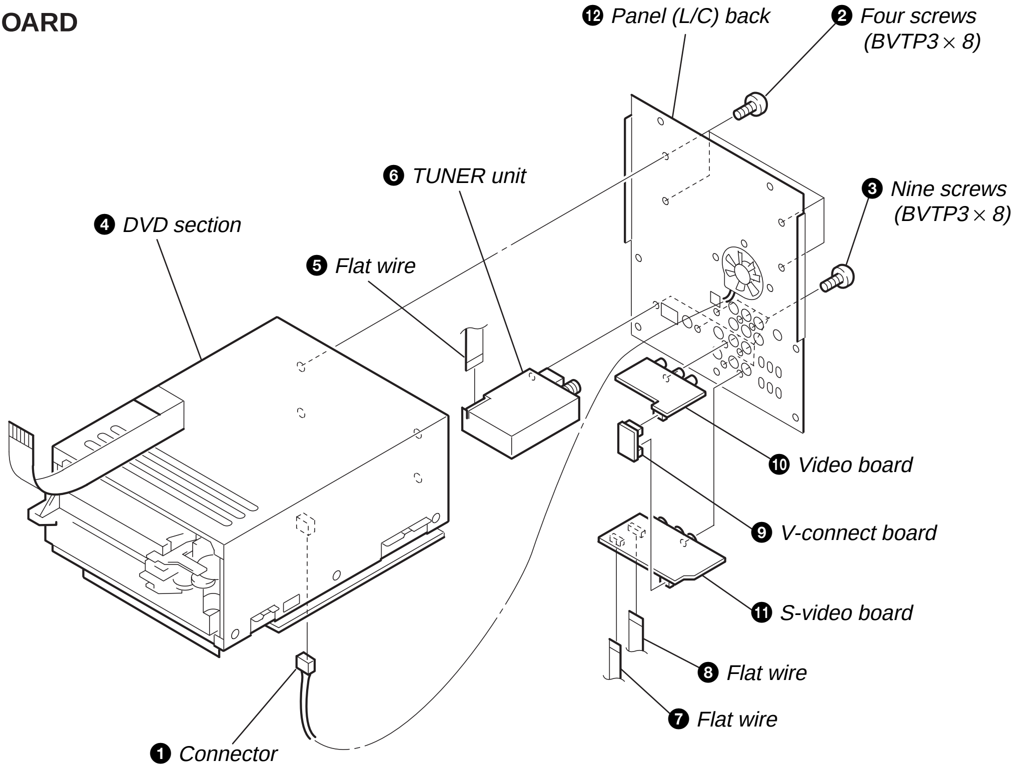
2-6. PS BOARD


❷ Six screws
(BVTP3 × 8)
❺ STBY board
❹ Four screws
(BVTP3 × 8)
❸ PS board
❶ Connector

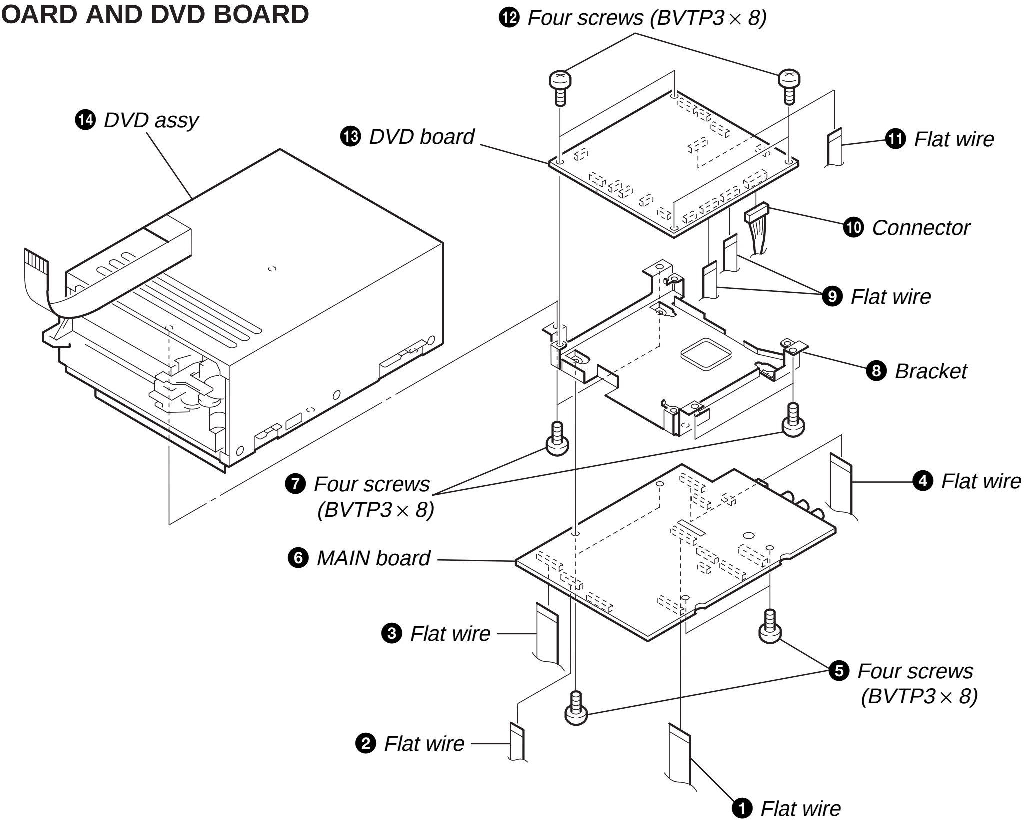
2-7. MECHANISM SECTION


❹ Six screws
(BVTT4 × 20)
❼ Mechanism section
❻ Flat wire
❶ 3 screws
(BVTP3 × 12)
❷ 2 screws
(BVTP3 × 12)
❸ 2 screws
(BVTT4 × 25)
❺ Four connectors
Main unit (L-ch) section

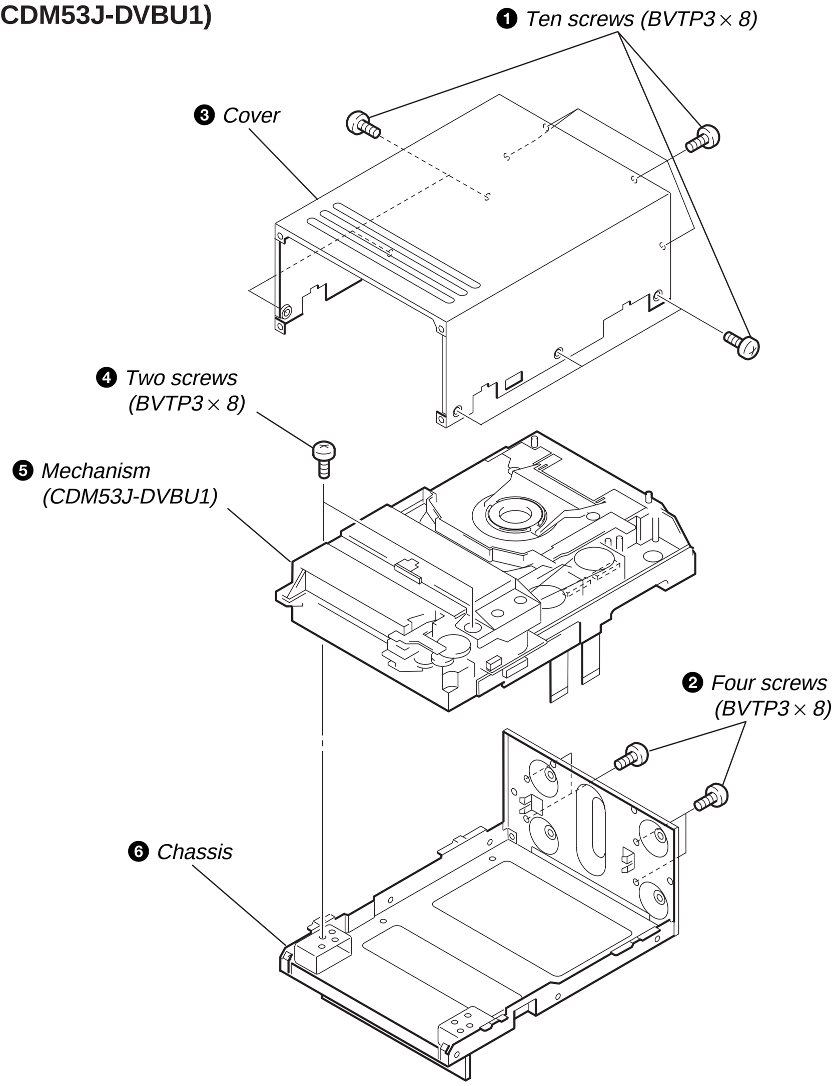
2-8. VIDEO BOARD


⓬ Panel (L/C) back
❷ Four screws
(BVTP3 × 8)
❻ TUNER unit
❸ Nine screws
(BVTP3 × 8)
❹ DVD section
❺ Flat wire
❿ Video board
❾ V-connect board
⓫ S-video board
❽ Flat wire
❼ Flat wire
❶ Connector

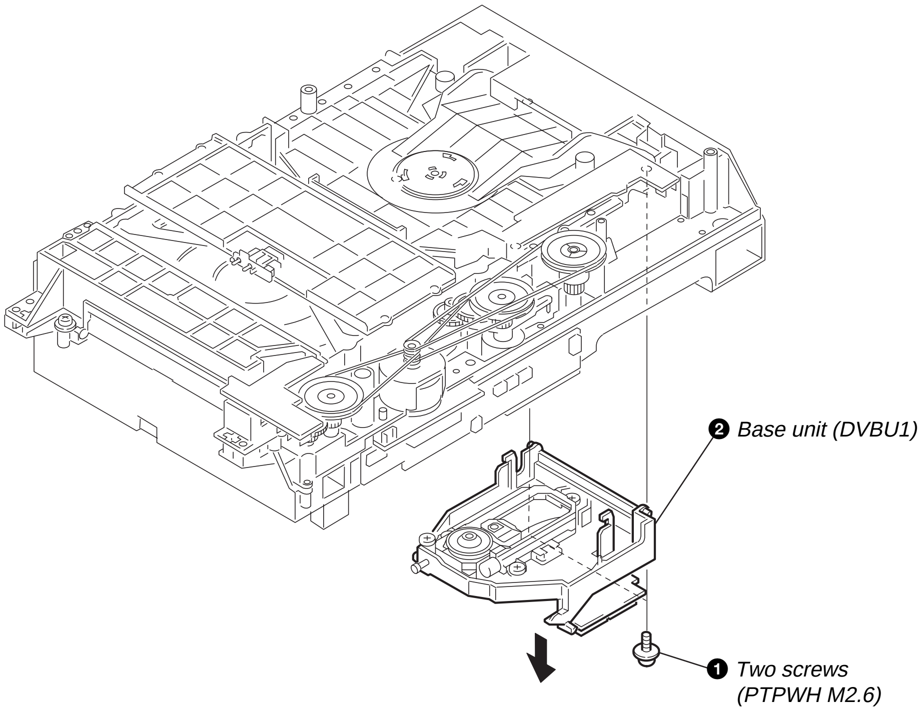
2-9. MAIN BOARD AND DVD BOARD


⓬ Four screws (BVTP3 × 8)
⓮ DVD assy
⓭ DVD board
⓫ Flat wire
❿ Connector
❾ Flat wire
❽ Bracket
❼ Four screws (BVTP3 × 8)
❹ Flat wire
❻ MAIN board
❸ Flat wire
❺ Four screws (BVTP3 × 8)
❷ Flat wire
❶ Flat wire

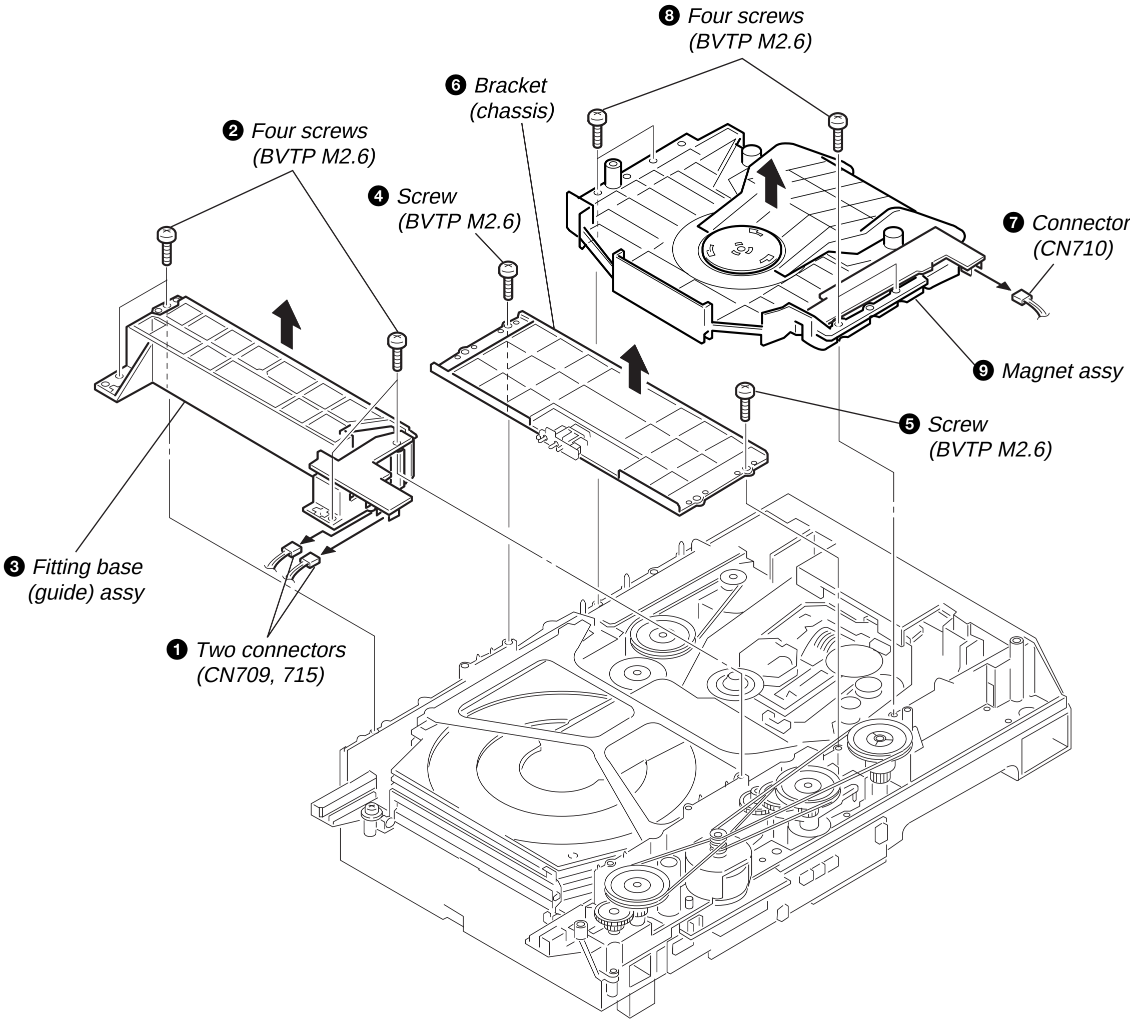
2-10. MECHANISM (CDM53J-DVBU1)


❶ Ten screws (BVTP3 × 8)
❸ Cover
❹ Two screws (BVTP3 × 8)
❺ Mechanism (CDM53J-DVBU1)
❷ Four screws (BVTP3 × 8)
❻ Chassis

2-11. BASE UNIT (DVBU1)

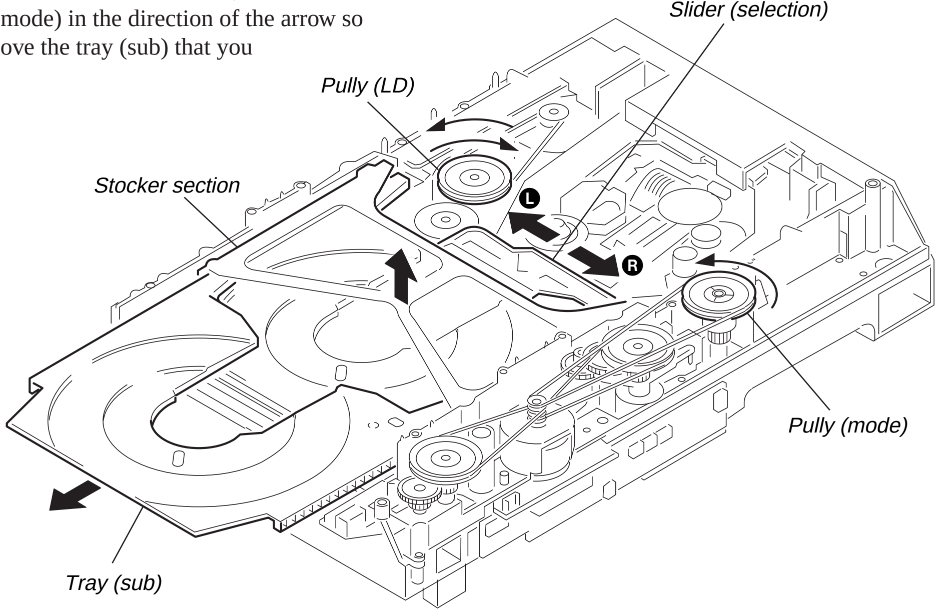

❷ Base unit (DVBU1)
❶ Two screws
(PTPWH M2.6)

2-12. MAGNET ASSY


❽ Four screws
(BVTP M2.6)
❻ Bracket
(chassis)
❷ Four screws
(BVTP M2.6)
❹ Screw
(BVTP M2.6)
❼ Connector
(CN710)
❾ Magnet assy
❺ Screw
(BVTP M2.6)
❸ Fitting base
(guide) assy
❶ Two connectors
(CN709, 715)

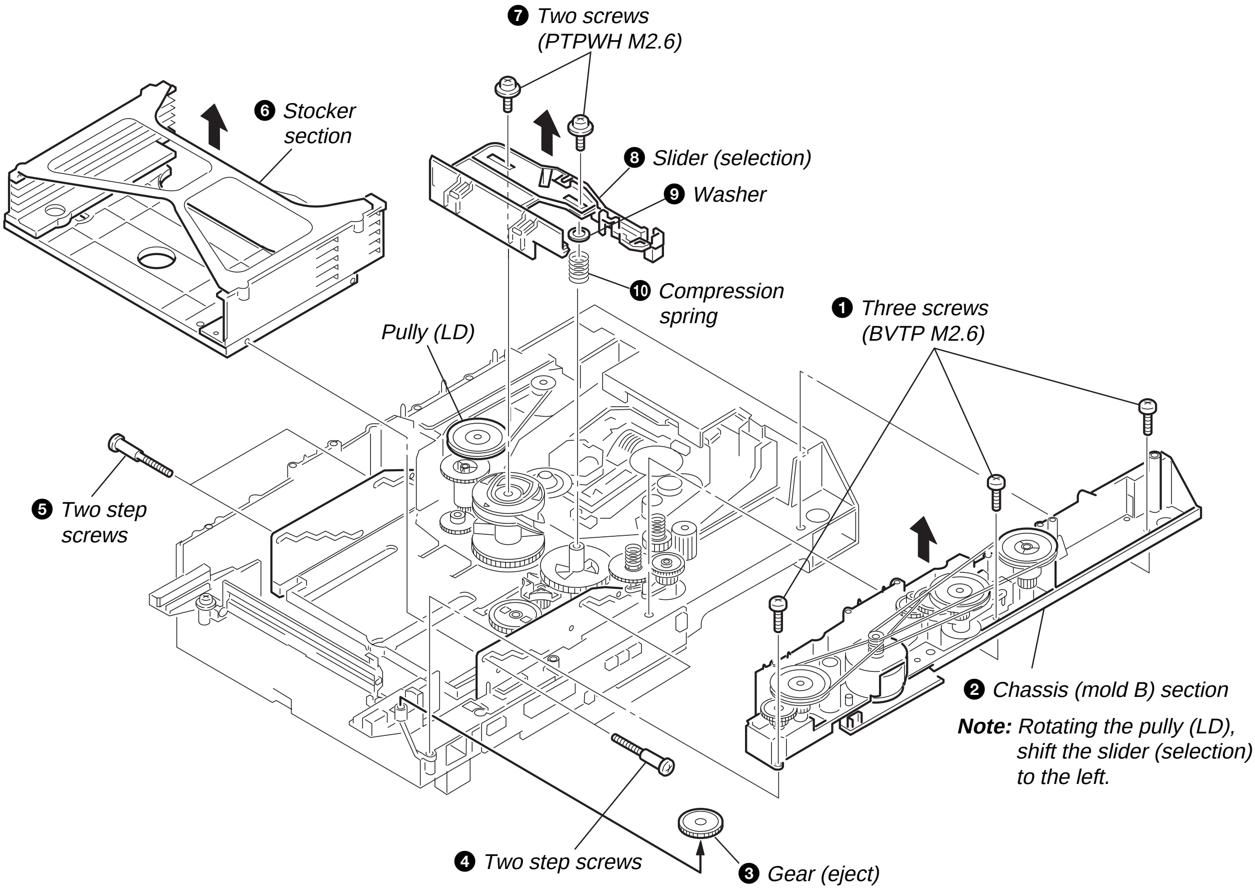
2-13. TRAY (SUB)

❶ Turn the pulley (LD) and move the slider (selection) in the direction of the arrow 🅛.
❷ Turn the pulley (mode) in the direction of the arrow to adjust the tray (sub) that you want to remove.
(It depends on the height and position of the stocker.)
❸ Turn the pulley (LD) and move the slider (selection) in the direction of the arrow 🅡.
❹ Turn the pulley (mode) in the direction of the arrow so that you can remove the tray (sub) that you want to remove.


Slider (selection)
Pully (LD)
Stocker section
🅛
🅡
Pully (mode)
Tray (sub)

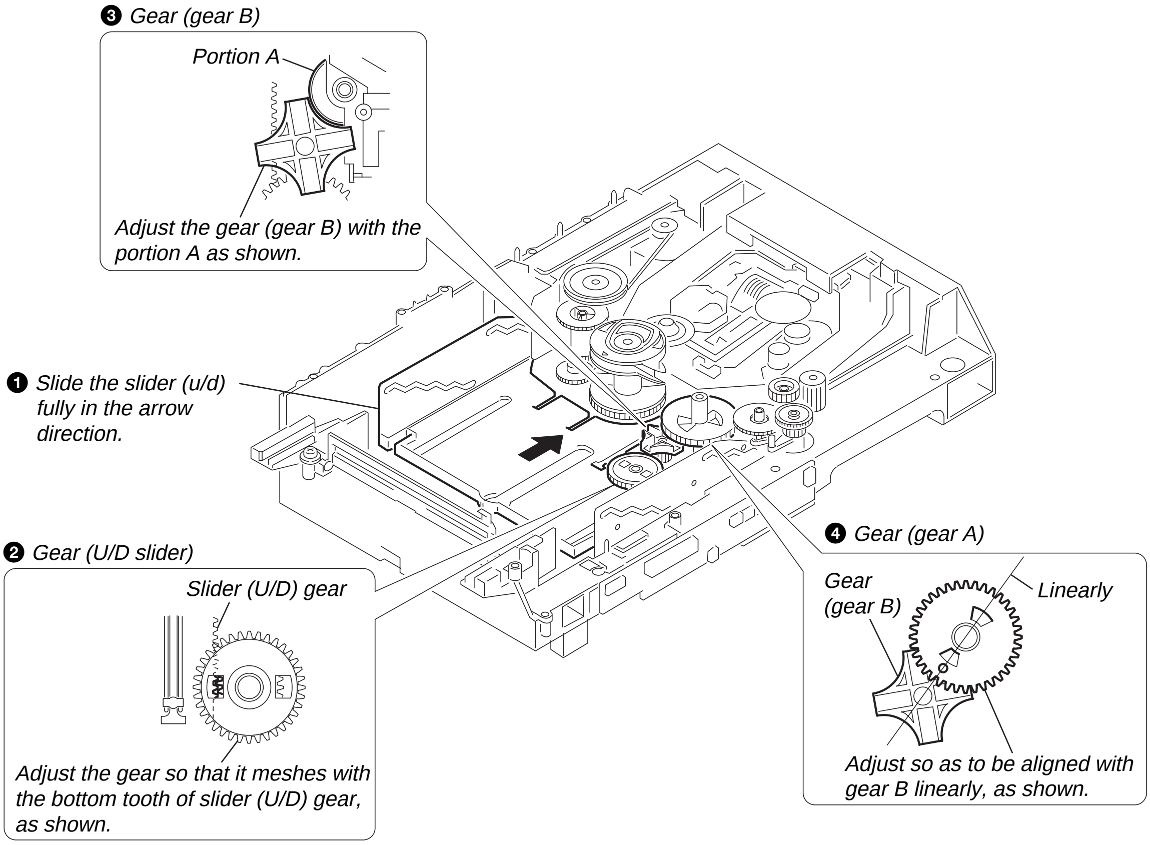
2-14. CHASSIS (MOLD B), STOCKER, SLIDER (SELECTION)

Note: When assembling the parts, refer to pages 13 and 14.


❼ Two screws
(PTPWH M2.6)
❻ Stocker
section
❽ Slider (selection)
❾ Washer
❿ Compression
spring
❶ Three screws
(BVTP M2.6)
Pully (LD)
❺ Two step
screws
❷ Chassis (mold B) section
❹ Two step screws
❸ Gear (eject)

Note: Rotating the pully (LD), shift the slider (selection) to the left.

2-15. HOW TO ASSEMBLE THE GEARS



❸ Gear (gear B)

Portion A

Adjust the gear (gear B) with the portion A as shown.

❶ Slide the slider (u/d) fully in the arrow direction.

❷ Gear (U/D slider)

Slider (U/D) gear

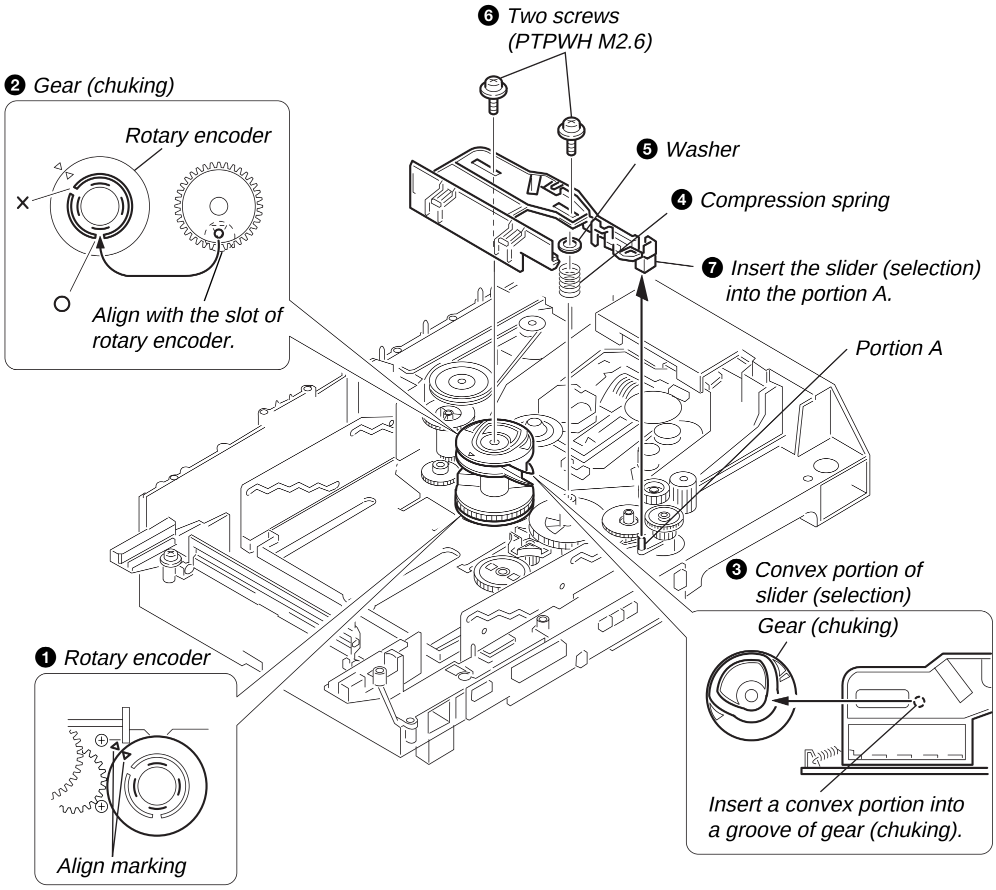
Adjust the gear so that it meshes with the bottom tooth of slider (U/D) gear, as shown.

❹ Gear (gear A)

Gear
(gear B)
Linearly

Adjust so as to be aligned with gear B linearly, as shown.

2-16. HOW TO ATTACH THE SLIDER (SELECTION)



❻ Two screws (PTPWH M2.6)

❷ Gear (chuking)

Rotary encoder
×
○

Align with the slot of rotary encoder.

❺ Washer

❹ Compression spring

❼ Insert the slider (selection) into the portion A.

Portion A

❸ Convex portion of slider (selection)

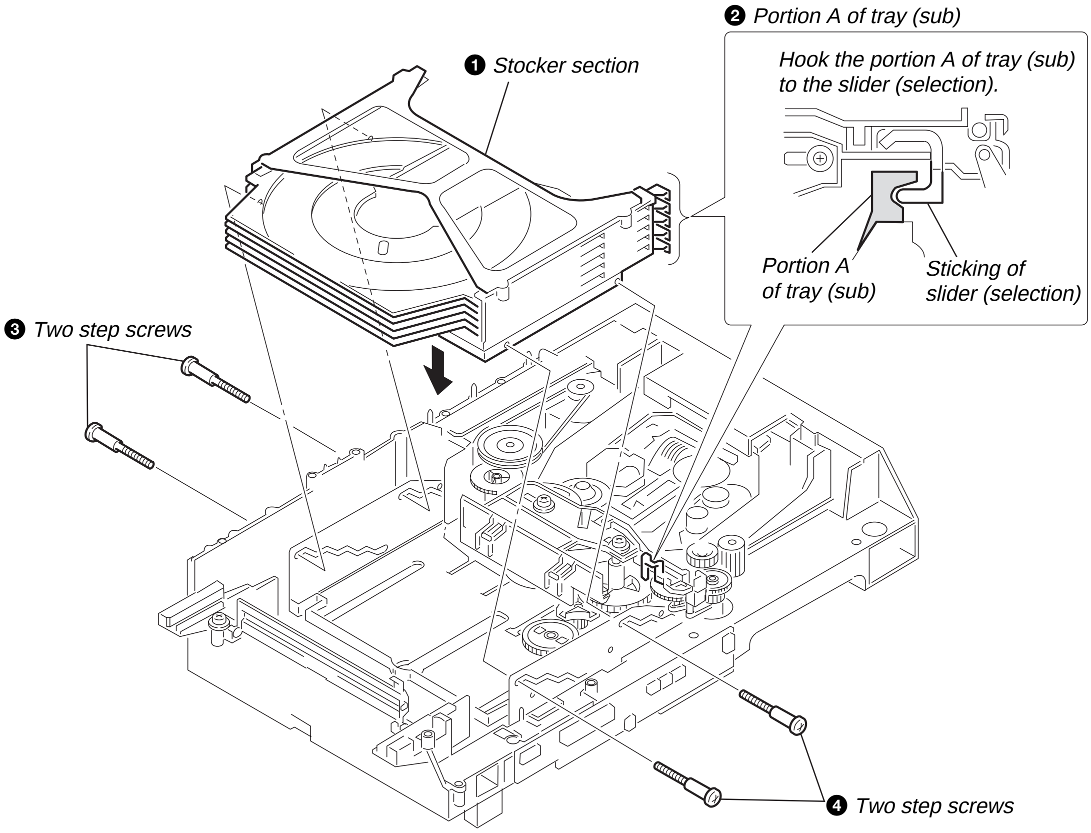
Gear (chuking)

Insert a convex portion into a groove of gear (chuking).

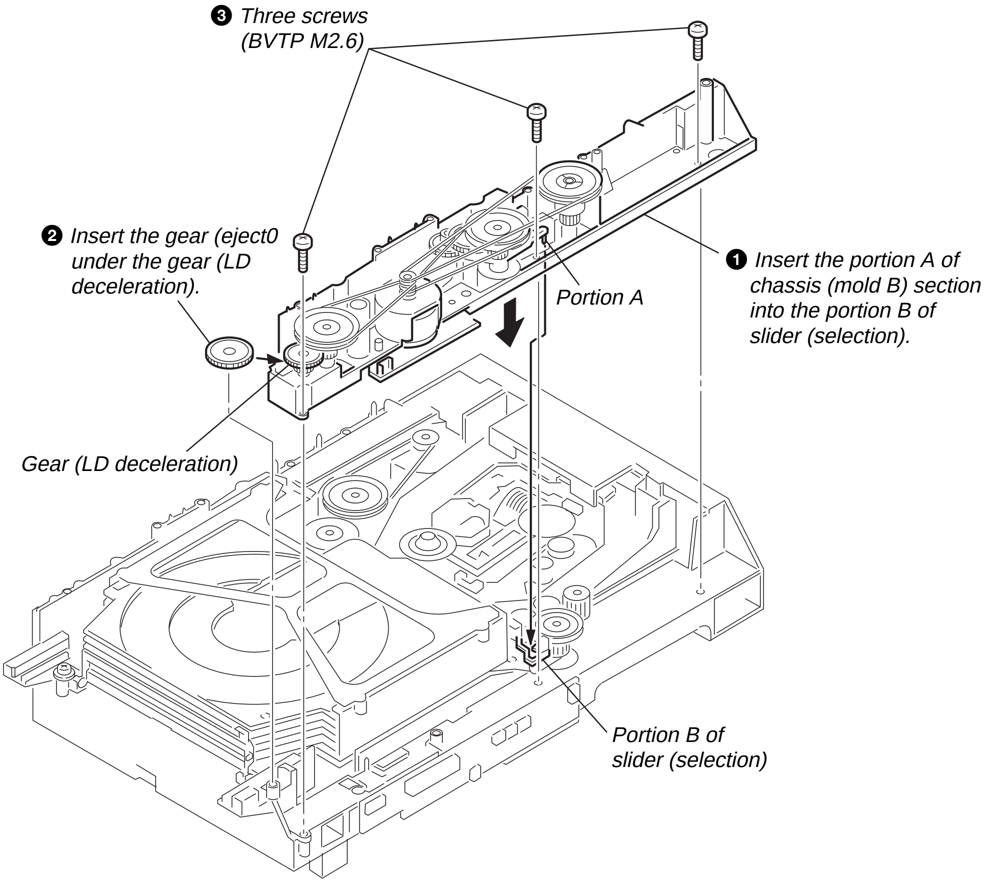
❶ Rotary encoder

Align marking

2-17. HOW TO ATTACH THE STOCKER


❷ Portion A of tray (sub)
Hook the portion A of tray (sub) to the slider (selection).
❶ Stocker section
Portion A of tray (sub)
Sticking of slider (selection)
❸ Two step screws
❹ Two step screws

2-18. HOW TO ATTACH THE CHASSIS (MOLD B)


❸ Three screws (BVTP M2.6)
❷ Insert the gear (eject0 under the gear (LD deceleration).
Portion A
❶ Insert the portion A of chassis (mold B) section into the portion B of slider (selection).
Gear (LD deceleration)
Portion B of slider (selection)

SECTION 3
TEST MODE

How to enter the test mode	Order of pressing simultaneously			Press to return
	1	2	3	
Blue display (test mode)	SWMODE	BAND	DISC 1	—
DVD microprocessor downloading mode	SWMODE	STOP	DISC 2	—
All cliar of STR side	SWMODE	STOP	DISC 3	—
Key Check	SWMODE	STOP	EJECT 3	SAVA-D900’s key
Display Check	SWMODE	BAND	EJECT 5	STOP
Speaker Check	SWMODE	STOP	EJECT 4	STOP

* The speaker check mode is the test mode in which the sound signel that is input to the TV INPUT is output from all speakers at the unity sound level.

- Selcting 9K or 10K of AM

  Select the AM band. Turn off the main power. While pressing the SUB WOOFFER MODE button, press the **I/⏻** (power) switch to turn on the main power.

3-1. GENERAL DESCRIPTION

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

3-2. STARTING TEST MODE

Set the FUNCTION to DVD with the main unit power on. Next, while pushing the STOP button and the MUTING button on the main unit at the same time, turn the regulator to the right to start Test Mode and display the menu shown below on the TV screen. At the bottom of the menu screen, the model name and revision number are displayed.

To execute each function, select the desired menu and press its number on the remote commander. To exit from Test Mode, press the POWER button.

```
Test Mode Menu

0. Syscon Diagnosis
1. Drive Auto Adjustment
2. Drive Manual Operation
3. Mecha Aging
4. Emergency History
5. Version Information
6. Video Level Adjustment
Exit: Power Key
_
Model    : HCX932xxxx
Revision: 1.xxx
```

3-3. SYSCON DIAGNOSIS

The same contents as board detail check by serial interface can be checked from the remote commander.

On the Test Mode Menu screen, press 0 key on the remote commander, and the following check menu will be displayed.

```
    ### Syscon Diagnosis ###
           Check Menu
0. Quit
1. All
2. Version
3. Peripheral
4. Servo
5. Supply
6. AV Decoder
7. Video
8. Audio
_
```

0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

1. All

All items continuous check

This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

```
    ### Syscon Diagnosis ###

Diag All Check
No. 2 Version

 2-3. ROM Check Sum
Check Sum = 2005



Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.

Following the message, press NEXT key to go to the next item, or PREV key to repeat the same check again. To quit the diagnosis and return to the Check Menu screen, press STOP or ENTER key. If an error occurred, the diagnosis is suspended and the error code is displayed as shown below.

```
    ### Syscon Diagnosis ###




 3-3. EEPROM Check
Error 03: EEPROM Write/Reed N
Address    : 00000001
Write Data : 2492
Read Data  : 2490
Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

Press STOP key to quit the diagnosis, or PREV key to repeat the same item where an error occurred, or NEXT key to continue the check from the item next to faulty item.

Selecting 2 and subsequent items calls the submenu screen of each item.

For example, if “5. Supply” is selected, the following submenu will be displayed.

```
    ### Syscon Diagnosis ###
           Check Menu
          No. 5 Supply
0. Quit
1. All
2. ARP Register Check
3. ARP to RAM Data Bus
4. ARP to RAM Address Bus
5. ARP RAM Check
_
```

0. Quit

Quit the submenu and return to the main menu.

1. All

All submenu items continuous check

This menu checks 2 and subsequent items successively. At the item where visual check is required for judgment or an error occurred, the checking is suspended and the message is output for key entry. Normally, all items are checked successively one after another automatically unless an error is found.

Selecting 2 and subsequent items executes respective menus and outputs the results.
For the contents of each submenu, see “Check Items List”.

General Description of Checking Method

2. Version

(2-2) Revision
ROM revision number is displayed.-
Error: Not detected.
The revision number defined in the source file of ROM (At the beginning of mass production, the Flash ROM of IC205 is used, but midway it is replaced by the IC206 OTP ROM. IC205 or IC206) is displayed with four digits.
Below IC205 are all IC205 or IC206.

(2-3) ROM Check Sum
Check sum is calculated.
Error: Not detected.
The 8-bit data are added at addresses 0x000F0000 ~ 0x002EFFFF of ROM (IC205) and the result is displayed with 4-digit hexadecimal number. Error is not detected. Compare the result with the specified value.

(2-4) Model Type
Model code is displayed.
Error: Not detected.
The model code read from EEPROM (IC201) is displayed with 2-digit hexadecimal number.

	Model Type
SAVA-D900	20

(2-5) Region
Region code is displayed.
Error: Not detected.
The region code determined from the model code is displayed.

3. Peripheral

(3-2) Gate Array Check
Data write → read, and accord check
Error 02: Gate array write/read discord
Data 0x00~0xFF are written to the address 0xF of GA (IC601), then read and checked if they accord.

(3-3) EEPROM Check
Data write → read, and accord check
Error 03: EEPROM write/read discord
Data 0x9249, 0x2942, 0x4294 are written to addresses 0x00~0xFF of EEPROM (IC201), then read and checked. Before writing, the data are saved, then after checking, they are written to restore the contents of EEPROM.

4. Servo

(4-2) Servo DSP Check
Data write → read, and accord check
Error 12: Read data discord
Data 0x9249, 0x2942, 0x4294 are written to the address 0x602 of RAM in the Servo DSP (IC701), then read and checked.

(4-3) DSP Driver Test
Test signal data → DSP Driver
Error: Not detected.
Caution: Do not conduct this test with a mechanical deck connected.
The maximum voltage is applied to the Servo Driver IC (IC801, IC802). If mechanical deck is connected, the motor and optics could be damaged. Disconnect mechanical deck following the output message, then enter specified 4- or 5-digit number from the remote commander, and press the ENTER. The test is conducted only when the input data accord. Check the output level, then press the NEXT to finish the test.
This test is skipped if “All” is selected.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN002 and CN003 of MB-82/85 board. Also, disconnect harness from the CN011.

5. Supply

Caution: Do not conduct this check with a mechanical deck connected.
An access is made to the stream supply and servo control IC (IC303) and external RAM (IC304) using check data. If mechanical deck is connected, the motor and optics could be damaged. This check is also executed by the “All” menu item.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN002 and CN003 of DVD board. Also, disconnect harness from the CN011.

(5-2) ARP Register Check
Data write → read, and accord check
Error 08: ARP register write, and read data discord
Data 0x00 to 0xFF are written to the TMAX register (address 0xC6) in ARP (IC303), then they are read and checked.

(5-3) ARP to RAM Data Bus
Data write → read, and accord check
Error 09: ARP ←→ RAM data bus error
Data 0x0001 to 0x8000 where one bit each is set to 1 are written to the address 0 of RAM (IC304) connected to the ARP (IC303) through the bus, then they are read and checked. In case of discord, written bit pattern and read data are displayed. If data where multiple bits are 1 are read, the bits concerned may touch each other. Further, if data where certain bit is always 1 or 0 regardless of written data, the line could be disconnected or shorted.

(5-4) ARP to RAM Address Bus

Data write → other address read discord check

Error 10: ARP → RAM address bus error

Caution: Address and data display in case of an error is different from the display of other diagnosis (described later).

Before starting the test, all addresses of RAM (IC304) are cleared to 0x0000.

First, 0xA55A is written to the address 0x00000, and the address data are read and checked from addresses 0x00001 to 0x80000 while shifting 1 bit each. Next, the data at that address is cleared, and it is written to the address 0x00001, and read and checked in the same manner. This check is repeated up to the address 0x80000 while shifting the address data by 1 bit each.

If data other than 0 is read at the addresses except written address, an error is given because all addresses were already cleared to 0. In this check, the error display pattern is different from that of other diagnosis; read data, written address, and read address are displayed in this order. However, the message uses same template, and accordingly exchange Address and Data when reading. The following display, for example,

```
    ### Syscon Diagnosis ###




 5-4. ARP to RAM Address Bus
Error 10: ARP - RAM Address B
Address    : 0000A55A
Write Data : 00000000
Read Data  : 00080000
Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

shows the data 0xA55A was read from address 0x00080000 though it was written to the address 0x00000000. This implies that these addresses are in the form of shadow. Also, if the read data is not 0xA55A, another error will be present.

(5-5) ARP RAM Check

Data write → read, and accord check

Error 11: ARP RAM read data discord

The program code data stored in ROM are copied to all areas of RAM (IC304) connected to the ARP (IC303) through the bus, then they are read and checked if they accord. If the detail check was selected initially, the data are written to all areas and read, then the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 11, and the test is suspended.

6. AV Decoder

(6-2) 1930 RAM

Data write → read, and accord check

Error 13: AVD RAM read data discord

The program code data stored in ROM (IC205) are copied to all areas of RAM (IC402, IC403) connected to the AVD (IC401) through the bus, then they are read and checked if they accord. Further, the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 13, and the test is suspended.

(6-3) 1930 SP

ROM → AVD RAM → Video OUT

Error: Not detected.

The data including sub picture streams in ROM (IC205) are transferred to the RAM (IC402, IC403) in AVD (IC401), and output as video signals from the AVD (IC401).

They are output from all video terminals (Composite, Y/C).

7. Video

(7-2) Color Bar

AVD color bar command write → Video OUT

Error: Not detected.

The command is transferred to the AVD, and the color bar signals are output from video terminals.

They are output from all video terminals (Composite, Y/C).

8. Audio

(8-2) ARP → 1930

Error 14 : ARP → 1930 video NG
15 : ARP → 1930 audio NG

Check Items List

2) Version
(2-2) Revision
(2-3) ROM Check Sum
(2-4) Model Type
(2-5) Region

3) Peripheral
(3-2) Gate Array Check
(3-3) EEPROM Check

4) Servo
(4-2) Servo DSP Check
(4-3) DSP Driver Test

5) Supply
(5-2) ARP Register Check
(5-3) ARP to RAM Data Bus
(5-4) ARP to RAM Address Bus
(5-5) ARP RAM Check

6) AV Decoder
(6-2) 1930 RAM
(6-3) 1930 SP

7) Video
(7-2) Color Bar

8) Audio
(8-2) ARP → 1930
(8-3) Test Tone

Error Codes List

00: Error not detected
01: RAM write/read data discord
02: Gate array NG
03: EEPROM NG
08: ARP register read data discord
09: ARP ←→ RAM data bus error
10: ARP ←→ RAM address bus error
11: ARP RAM read data discord
12: Servo DSP NG
13: 1930 SDRAM NG
14: ARP → 1930 video NG
15: ARP → 1930 audio NG
16: 1910 UCODE download NG
17: System call error (function not supported)
18: System call error (parameter error)
19: System call error (illegal ID number)
20: System call error (time out)
90: Error occurred
91: User verification NG
92: Diagnosis cancelled

3-4. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press 1 key on the remote commander, and the drive auto adjustment menu will be displayed.

```
  ## Drive Auto Adjustment ##

        Adjustment Menu

0. ALL
1. DVD-SL
2. CD
3. DVD-DL
4. SACD



                   Exit: RETURN
```

Normally, 0 is selected to adjust DVD (single layer), CD, DVD (dual layer), and SACD in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen.
The disc used for adjustment must be the one specified for adjustment. However, for SACD disc, use the player with initial data if the disc is not available.

0. ALL

Select 0 and press ENTER key, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc, 3. DVD-DL disc, and 4. SACD disc are adjusted in this order. Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. Though the message to confirm whether discs other than SACD disc are adjusted is not displayed, you can finish the adjustment if pressing the STOP button. During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

1. DVD-SL (single layer)

Select 1, insert DVD single layer disc, and press ENTER key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps
1. SLED TILT Reset
2. Disc Check Memory SL
3. Wait 300 msec
4. Set Disc Type SL
5. LD ON
6. Spdl Start
7. Wait 1 sec
8. Focus Servo ON 0
9. Auto Track Offset Adjust
10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. Wait 1 sec
14. Sled ON
15. Check CLV Lock
16. Auto LFO Adjust
17. Auto Focus Offset Adjust
18. Auto Tilt Position Adjust
19. Auto Focus Gain Adjust
20. Auto Focus Offset Adjust
21. EQ Boost Adjust
22. Auto LFO Adjust
23. Auto Track Gain Adjust, Search Check
24. 32Tj Fwd
25. 32Tj Rev
26. 500Tj Fwd
27. 500Tj Rev

28. All Servo Stop
29. Eep Copy Loop Filter Offset

2. CD

Select 2, insert CD disc, and press ENTER key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

CD Adjustment Steps

1. Sled Tilt Rest
2. Disc Check Memory CD
3. Wait 500 msec
4. Set Disc Type CD
5. LD ON
6. Spdl Start
7. Wait 500 msec
8. Focus Servo ON 0
9. Auto Track Offset Adjust

10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. (TC Display Start)
14. Wait 1 sec
15. Jitter Display Start
16. Sled ON
17. Check CLV ON
18. Auto LFO Adjust
19. Auto Focus Offset Adjust
20.
21. Auto Focus Gain Adjust
22. Auto Focus Offset Adjust
23. Eq Boost Adjust
24. Auto LFO Adjust
25. Auto Track Gain Adjust, Search Check
26. 32Tj Fwd
27. 32Tj Rev
28. 500Tj Fwd
29. 500Tj Rev

30. All Servo Stop

3. DVD-DL (dual layer)

Select 3, insert DVD dual layer disc, and press ENTER key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps

1. Sled Tilt Reset
2. Disc Check Memory DL
3. Wait 500 msec
4. Set Disc Type DL
5. LD ON
6. Spdl Start
7. Wait 1 sec, Layer 1 Adjust
8. Focus Servo ON 0
9. Auto Track Offset Adjust

10. Clva ON
11. Wait 500 msec
12. Tracking ON
13. Wait 500 msec
14. Sled ON
15. Check CLV Lock
16. Auto Loop Filter Offset Auto Focus Adjust
17.
18. Auto Focus Gain Adjust
19. Auto Focus Offset Adjust
20. Eq Boost Adjust
21. Auto Loop Filter Offset
22. Auto Track Gain Adjust, Search Check
23. 32Tj Fwd
24. 32Tj Rev
25. 500Tj Fwd
26. 500Tj Rev, Layer 0 Adjust
27. Fj (L1 -> L0)
28. Auto Track Offset Adjust L0

29. Clva ON
30. Wait 500 msec
31. Tracking ON
32. Wait 500 msec
33. Sled ON
34. Check CLV Lock
35. Auto Focus Filter Offset
36. Auto Focus Adjust
37.
38. Auto Focus Gain Adjust
39. Auto Focus Offset Adjust
40. Eq Boost Adjust
41. Auto Loop Filter Offset
42. Auto Track Gain Adjust, Search Check
43. 32Tj Fwd
44. 32Tj Rev
45. 500Tj fwd
46. 500Tj Rev, Layer Jump Check
47. Lj (L0 -> L1)
48. Lj (L1 -> L0)

49. All Servo Stop

4. SACD

Select 4, insert SACD disc, and press ENTER key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM. However, if SACD disc is not available, use the player with initial data, skipping the SACD adjustment. In this case, you can finish the adjustment if pressing the STOP button.

SACD Adjustment Steps

1. Sled Tilt Reset
2. Set Disc Type CD
3. LD ON
4. Spdl Start
5. Wait 500 msec
6. Focus Servo ON 0
7. Auto track Offset Adjust
8.
9. CLVA ON
10. Wait 500 msec
11. Tracking ON
12. Wait 1 sec
13. Sled ON
14. Check CLV ON
15. Auto Focus Offset Adjust
17.
18. Auto Focus Gain Adjust
19. Auto Focus Offset Adjust
20. Eq Boost Adjust
21. Auto LFO Adjust
22. Auto Track Gain Adjust

23. 32Tj Fwd
24. 32Tj Rev
25. 500Tj Fwd
26. 500Tj Rev

27. All Servo Stop */

3-5. DRIVE MANUAL OPERATION

On the Test Mode Menu screen, select 2, and the manual operation menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

```
  ## Drive Manual Operation ##

         Operation Menu
1. Disc type
2. Servo Control
3. Track/Layer Jump
4. Manual Adjustment
5. Auto Adjustment
6. Memory Check

0. Disc Check Memory

                 Exit: Return
```

In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

1. Set correctly the disc type to be used on the Disc Type screen.
   The disc type must be set after a disc was loaded.
   The set disc type is cleared when the tray is opened.
2. After power ON, if the Drive Manual Operation was selected, first perform “Reset SLED TILT” by opening 1. Disc Type screen.
3. In case of an alarm, immediately press the STOP button to stop the servo operation, and turn the power OFF.

Basic operation (controllable from front panel or remote commander)

POWER	Power OFF
STOP	Servo stop
OPEN/CLOSE	Stop+Eject/Loading
RETURN	Return to Operation Menu or Test Mode Menu
NEXT, PREV	Transition between sub modes of menu
1 to 9, 0	Selection of menu items
Cursor UP/DOWN	Increase/Decrease in manually adjusted value

0. Disc Check Memory

```
            Disc Check



1. SL Disc Check
2. CD Disc Check
3. DL Disc Check




0. Reset SLED TILT
```

On this screen, the mirror time is measured to judge the disc and it is written to the EEPROM. First load DVD SL disc and press 1, next load CD disc and press 2, and finally load DVD DL disc and press 3.
The adjustment must be executed more than once after default data were written. External vibration or shock to the player must not be given. Reference value for DVD is from 10 to 20, and for CD, from 28 to 4F.
Check that the value of CD is larger than that of DVD.
When those values are beyond a range perform this adjustment again.
From this screen, you can go to another mode by pressing NEXT or PREV key, but you cannot enter this mode from another mode. You can enter this mode from the Operation Menu screen only.

1. Disc Type

```
            Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. SACD     12 cm
6. dvd SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. SACD     8 cm
0. Reset SLED TILT
                        EMG. 00
```

On this screen, select the disc type. To select the disc type, press the number of the loaded disc. The selected disc type is displayed at the bottom. Selecting 1 automatically selects and displays the disc type. In case of wrong display, retry “Disc Check Memory”. Also, opening the tray causes the set disc type to be cleared. In this case, set the disc type again after loading.
In performing manual operation, the disc type must be set.
Once the disc type has been selected, the sector address or time code display field will appear as shown below. These values are displayed when PLL is locked.

```
            Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. SACD     12 cm
6. dvd SL   8 cm      ___
7. DVD DL   8 cm
8. CD       8 cm
9. SACD     8 cm
0. Reset SLED TILT
        SA.     SI.    EMG. 00
DVD SL 12 cm
```

Display when DVD SL 12cm disc was selected

```
            Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. SACD     12 cm
6. dvd SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. SACD     8 cm
0. Reset SLED TILT
         TC.——:——:—— EMG. 00
CD   12 cm
```

Display when CD 12cm disc was selected

0 Reset SLED TILT	Reset the Sled and Tilt to initial position.
1 Disk Type Check	Judge automatically the loaded disc. As the judged result is displayed at the bottom of screen, make sure that it is correct. If Disc Check Memory menu has not been executed after EEPROM default setting, the disc type cannot be judged. In this case, return to the initial menu and make a check for three types of discs (SL, DL, CD).
2 to 9	Select the loaded disc. The adjusted value is written to the address of selected disc. No further entry is necessary if 1 was selected.

2. Servo Control

```
         Servo Control
1. LD         Off R.Sled FWD
2. SP         Off L.Sled REV
3. Focus      Off
4. TRK.       Off
5. Sled       Off
6. CLVA       Off
7. FCS. Srch Off


0. Reset SLED TILT
        SA.————SI.—— EMG. 00
DVD SL 12 cm
```

On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked.
The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

0	Reset SLED TILT	Reset the Sled and Tilt to initial position.
1	LD	Turn ON/OFF the laser.
2	SP	Turn ON/OFF the spindle.
3	Focus	Search the focus and turn on the focus.
4	TRK	Turn ON/OFF the tracking servo.
5	Sled	Turn ON/OFF the sled servo.
6	CLVA	Turn ON/OFF normal servo of spindle servo.
7	FCS. Srch	Apply same voltage as that of focus search to the focus drive to check the focus drive system.
→	Sled FWD	Move the sled outward. Perform this operation with the tracking servo turned off.
←	Sled REV	Move the sled inward. Perform this operation with the tracking servo turned off.
↑	Tilt UP	Move the tilt upward.
↓	Tilt DOWN	Move the tilt downward.

The following menus are normally not used.

3. Track/Layer Jump

4. Manual Adjustment

5. Auto Adjustment

The persons who do not know well about these menus should not use them.

6. Memory Check

```
EEPROM DATA
                CD       – DVD –
ID No. 00      SACD     SL  L0  L1
Focus Gain     xx xx    xx  xx  xx
TRK. Gain      xx xx    xx  xx  xx
Focus Offset   xx xx    xx  xx  xx
TRK. Offset    xx xx    xx  xx  xx
L. F. Offset   xx xx    xx  xx  xx
EQ Boost       xx xx    xx  xx  xx
Jitter         xx xx    xx  xx  xx
Mirror Time    xx xx    xx  xx  xx
_
CLEAR: Default Set
```

This screen displays current servo adjusted data stored in the EEPROM. Though adjusted data can be initialized with the CLEAR key, they cannot be restored after initialization.
So, before clearing, make a note of the adjusted data.
For reference, the drive has been designed so that the gain center value is 20 and offset value is 80. Other values will be in a range of 10 to 80. If extreme value such as 00 or FF is set, adjustment will be faulty. In such a case, check for disc scratch or cable disconnection, then perform adjustment again.

3-6. MECHA AGING

```
       ### Mecha Aging ###



1. TRAY Aging

2. SEARCH Aging


Abort: STOP key
```

On the Test Mode Menu Screen, selecting 3 executes the aging of the mechanism. TRAY aging or SEARCH aging are selected by 1 or 2. Start aging with PLAY. During aging, the repeat cycle is displayed. Aging can be aborted at any time by pressing the STOP key. After the operation is stopped, press the STOP key or RETURN key again to return to the Test Mode Menu. SEARCH Aging is only for a CD.

3-7. EMERGENCY HISTORY

```
     ### MEG. History ###

Laser Hours    CD   xxxxxxxh
               DVD  xxxxxxxh

1. 00 00 00 00  00 00 00 00
   00 00 00 00  00 00 00 00

2. 00 00 00 00  00 00 00 00
   00 00 00 00  00 00 00 00

Select: 1 – 9  Scroll: UP/DOWN
(1: Last EMG.)  Exit: Return
```

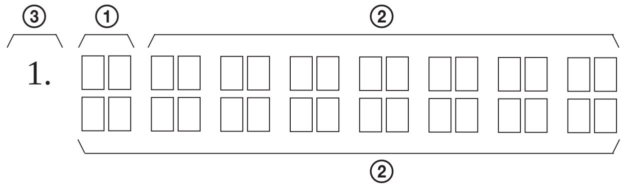
On the Test Mode Menu screen, selecting 4 displays the information such as servo emergency history. The history information from last 1 up to 10 can be scrolled with ↑ key or ↓ key. Also, specific information can be displayed by directly entering that number with ten keys.

The upper two lines display the laser ON total hours. Data below minutes are omitted.

Clearing History Information

Clearing laser hours
◎ Press DISPLAY and CLEAR keys in this order.
Both CD and DVD data are cleared.
Clearing emergency history
◎ Press TITLE and CLEAR keys in this order.
Initializing set up data
◎ Press DVD and CLEAR keys in this order.
The data have been initialized when “Set Up Initialized” message is displayed. The EMG. History screen will be restored soon.

How to see Emergency History



① : Emergency Code
② : Don't Care
These codes are used for verification of software designing.
③ : Historical order 1 to 9

Emergency Codes List

10: Communication to IC001 (TK board) failed.
11: Each servo for focus, tracking, and spindle is unlocked.
12: Communication to EEPROM, IC201 (DVD board) failed.
13: Writing of hours meter data to EEPROM, IC201 (DVD board) failed.
14: Communication to Servo DSP IC701 (DVD board) failed, or Servo DSP is faulty.
20: Initialization of tilt servo and sled servo failed. They are not placed in the initial position.
21: Tilt servo operation error
22: Syscon made a request to move the tilt servo to wrong position.
23: Sled servo operation error
24: Syscon made a request to move the sled servo to wrong position.
30: Tracking balance adjustment error
31: Tracking gain adjustment error
32: Focus balance adjustment error
33: Focus bias adjustment error
34: Focus gain adjustment error
35: Tilt servo adjustment error
36: RF equalizer adjustment error
37: RF group delay adjustment error
38: Jitter value after adaptive servo operation is too large.
40: Focus servo does not operate.
41: With a dual layer (DL) disc, focus jump failed.50: CLV (spindle) servo does not operate.
51: Spindle does not stop.
60: With a DVD disc, Syscon made a request to seek nonexistent address.
61: With a CD disc, Syscon made a request to seek nonexistent address.
62: With a CD disc, Syscon made a request to seek nonexistent track No. and index No.
63: With a DVD disc, seeking of target address failed.
64: With a CD disc, seeking of target address failed.
65: With a CD disc, seeking of target index failed.
70: With a DVD disc, physical information data could not be read.
71: With a CD disc, TOC data could not be read.
80: Disc type judgment failed.
81: As disc type judgment failed, retry was repeated.
82: As disc type judgment failed, a measurement error occurred.
83: Disc type could not be judged within the specified time.
84: Illegal command code was received from Syscon.
85: Illegal command was received from Syscon.

3-8. VERSION INFORMATION

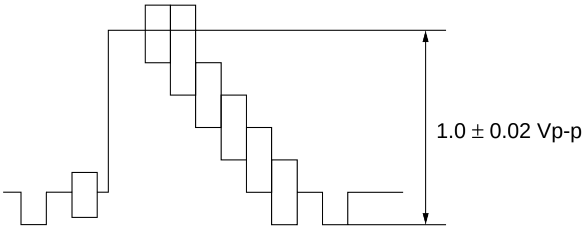
```
   ## Version Information ##

IF con.    Ver. x. xxx (xxxx)
           Group    00

SYScon.    Ver. x. xxx (xxxx)
           Model    xx
           Region   0x
           SW1      ??
           SW2      ??

Exit: RETURN
```

On the Test Mode Menu screen, selecting 5 displays the ROM version and region code.
The parenthesized hexadecimal number in version field is checksum value of ROM.

3-9. VIDEO LEVEL ADJUSTMENT

On the Test Mode Menu screen, selecting 6 displays color bars for video level adjustment. During display of color bars, OSD disappears but the menu screen will be restored if pressing any key.

Measurement point : LINE OUT VIDEO
(75 Ω terminating resistance)
Measuring instrument : Oscilloscope
Adjustment device : RV401 on DVD board
Specified value : 1.0 ± 0.02 Vpp



SECTION 4
ELECTRICAL ADJUSTMENTS

In making adjustment, refer to 4-2. Adjustment Related Parts Arrangement.

Note: During diagnostic check, the characters and color bars can be seen only with the NTSC monitor. Therefore, for diagnostic check, use the monitor that supports both NTSC and PAL modes

This section describes procedures and instructions necessary for adjusting electrical circuits in this set.

Instruments required:
1) Color monitor TV
2) Oscilloscope 1 or 2 phenomena, band width over 100 MHz, with delay mode
3) Frequency counter (over 8 digits)
4) Digital voltmeter
5) Standard commander
   * RM-SS300 (1-418-838-11)
6) DVD reference disc
   HLX-501 (J-6090-071-A) (dual layer)
   HLX-503 (J-6090-069-A) (single layer)
   HLX-504 (J-6090-088-A) (single layer)
   HLX-505 (J-6090-089-A) (dual layer)
7) SACD reference disc
   HLXA-509 (J-6090-090-A)

* Use only the designated remote control when adjusting this system component.

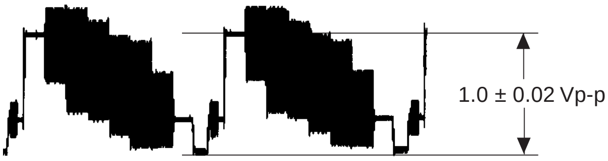
4-1. ADJUSTMENT OF VIDEO SYSTEM

1. Video Level Adjustment (DVD BOARD)

<Purpose>
This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	LINE OUT (VIDEO) connector (75 Ω terminated)
Instrument	Oscilloscope
Adjusting element	RV401
Specification	1.0 ± 0.02 Vp-p

Adjusting method:
1) Set so that color bars are generated.
2) Adjust the RV401 to attain 1.0 ± 0.02 Vp-p.

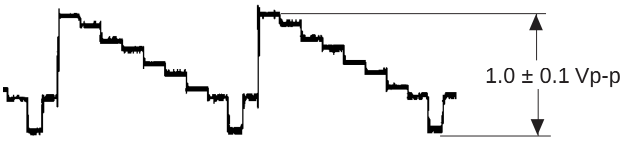


2. S-terminal Output Check (DVD BOARD)

<Purpose>
Check S-terminal video output. If it is incorrect, pictures will not be displayed correctly in spite of connection to the TV with a S-terminal cable.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	S VIDEO OUT (S-Y) connector (75 Ω terminated)
Instrument	Oscilloscope
Specification	1.0 ± 0.1 Vp-p

Checking method:
1) Set so that color bars are generated.
2) Confirm that the S-Y level is 1.0 ± 0.1 Vp-p.



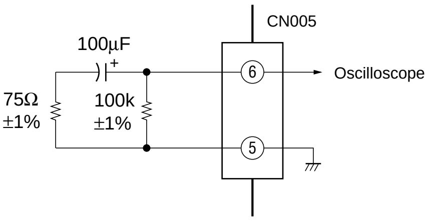
3. Checking S Video Output S-C (DVD BOARD)

<Purpose>

This checks whether the S-C satisfies the NTSC Standard. If it is not correct, the colors will be too dark or light.

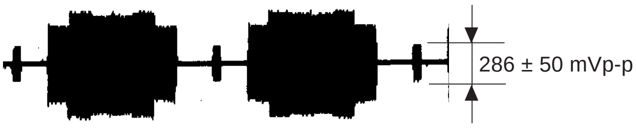
Mode	Video level adjustment in test mode
Signal	Color bars
Test point	CN005 pin ⑥
Instrument	Oscilloscope
Specification	286 ± 50 mVp-p

Connection:


CN005
100µF
75Ω
±1%
100k
±1%
6
5
Oscilloscope

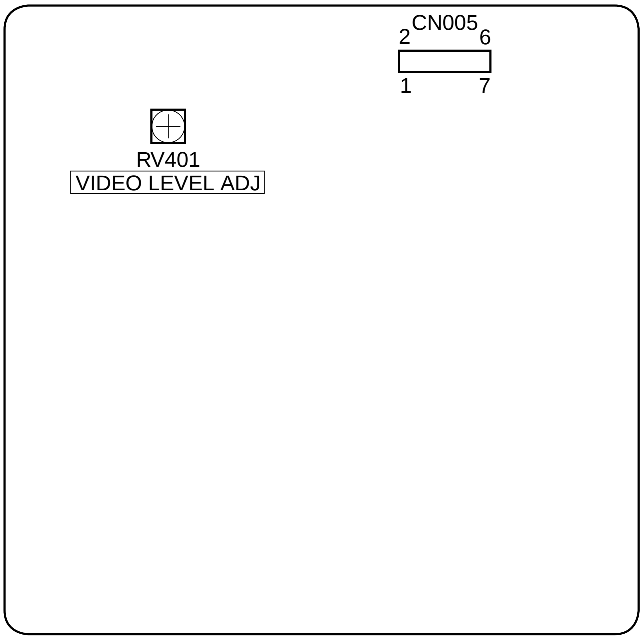
Checking method:

1) Confirm that the S-C burst is 286 ± 50 mVp-p.



4-2. ADJUSTMENT RELATED PARTS ARRANGEMENT

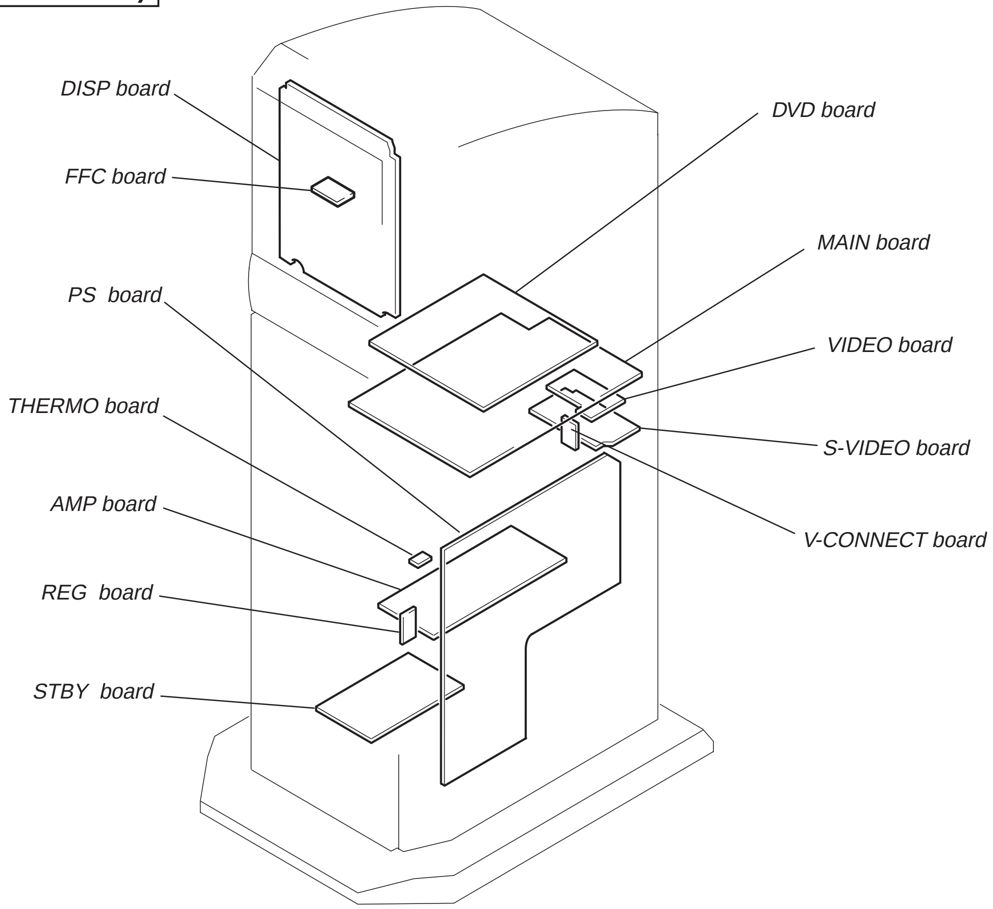
DVD BOARD (SIDE A)


CN005
2
6
1
7
RV401
VIDEO LEVEL ADJ

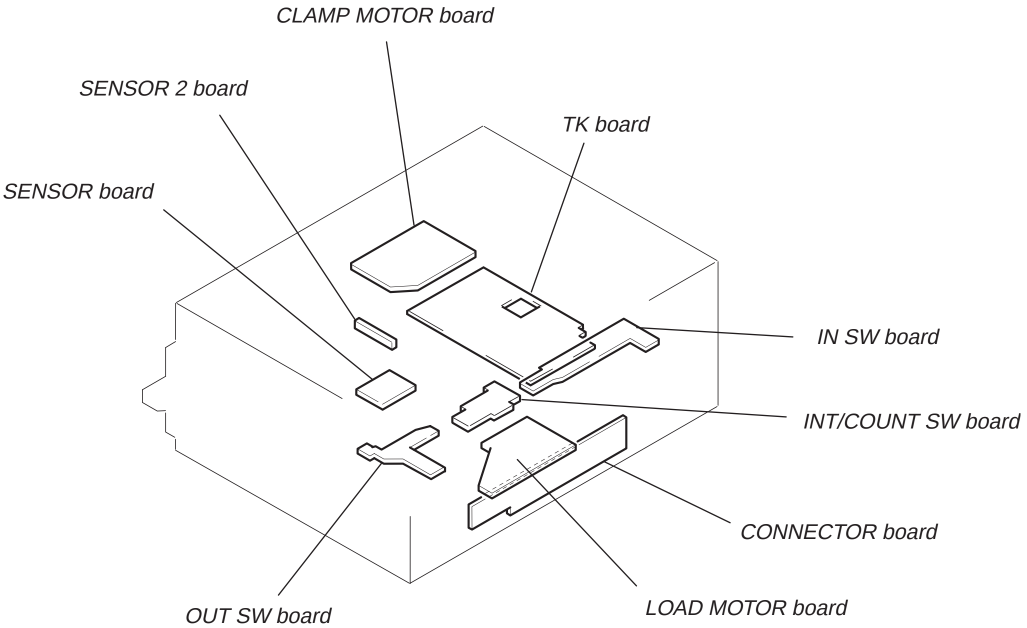
SECTION 5
DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION

SAVA-D900 (MAIN UNIT)


DISP board
FFC board
PS board
THERMO board
AMP board
REG board
STBY board
DVD board
MAIN board
VIDEO board
S-VIDEO board
V-CONNECT board

• Mechanism section (CDM53J-DVBU1)


CLAMP MOTOR board
SENSOR 2 board
TK board
SENSOR board
IN SW board
INT/COUNT SW board
CONNECTOR board
LOAD MOTOR board
OUT SW board

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

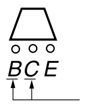
For schematic diagrams.
Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

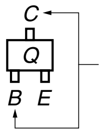
- **B +** : B+ Line.
- **B –** : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
  no mark : FM
  (   ) : DVD PLAY
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : DVD/CD
  ⇨ : AUDIO (digital)
  ⇨ : VIDEO
  ⇨ : C
  ⇨ : Y
  ➡ : FM

For printed wiring boards.
Note:
- o—— : parts extracted from the component side.
- ○ : Through hole.
- ▨ : Pattern from the side which enables seeing.

- **Indication of transistor**



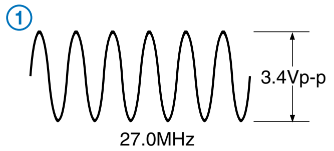
These are omitted



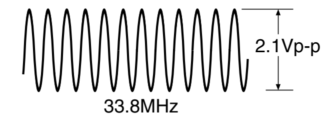
These are omitted

WAVEFORMS

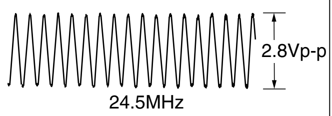
– DVD (1/12) SECTION –

①


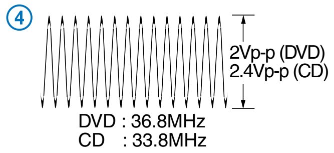
IC001 ⑥

②


IC001 ⑫

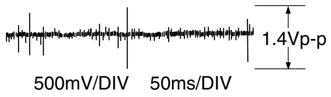
③


IC001 ⑬

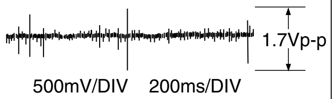
④


IC001 ⑰

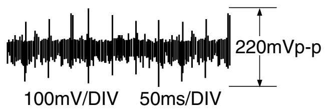
– DVD (2/12) SECTION –

⑤


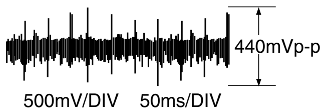
IC701 (69) DVD PLAY

⑥


IC701 (69) CD PLAY

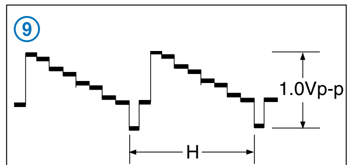
⑦


IC701 (68) DVD PLAY

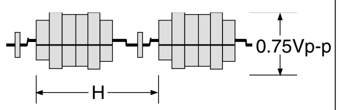
⑧


IC701 (68) CD PLAY

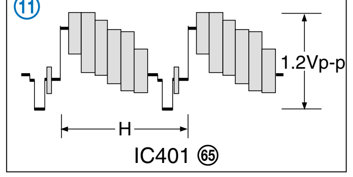
– DVD (4/12) SECTION –

⑨


IC401 (61)

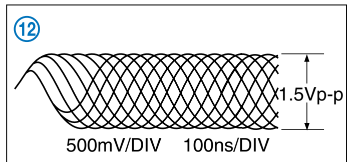
⑩


IC401 (62)

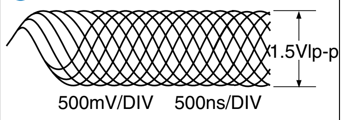
⑪


IC401 (65)

– DVD (5/12) SECTION –

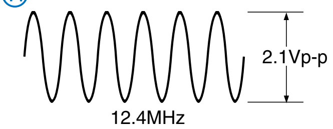
⑫


IC303 ⑰ DVD PLAY

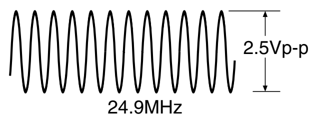
⑬


IC303 ⑲ CD PLAY

– DVD (8/12) SECTION –

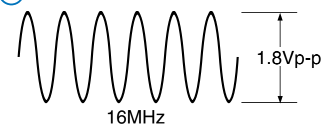
⑭


IC202 (92)

⑮


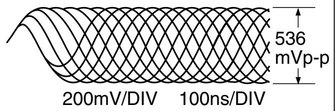
IC202 ⑤

– DVD (10/12) SECTION –

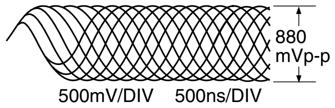
⑯


IC903 ⑮

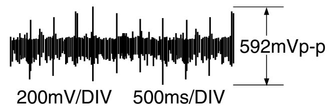
– TK SECTION –

①


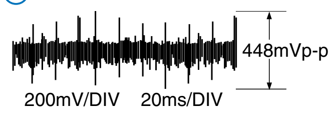
IC001 ① DVD PLAY

②


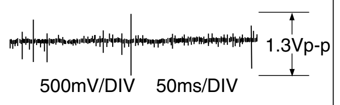
IC001 ① CD PLAY

③


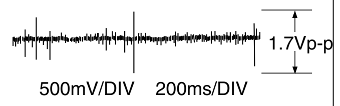
IC001 ㉙ DVD PLAY

④


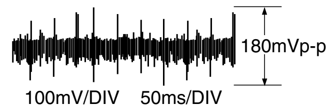
IC001 ㉙ CD PLAY

⑤


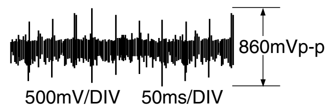
IC001 ㊴ DVD PLAY

⑥


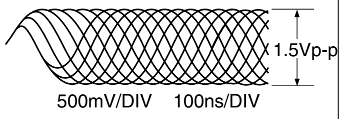
IC001 ㊴ CD PLAY

⑦


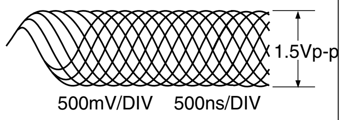
IC001 ㊵ DVD PLAY

⑧


IC001 ㊵ CD PLAY

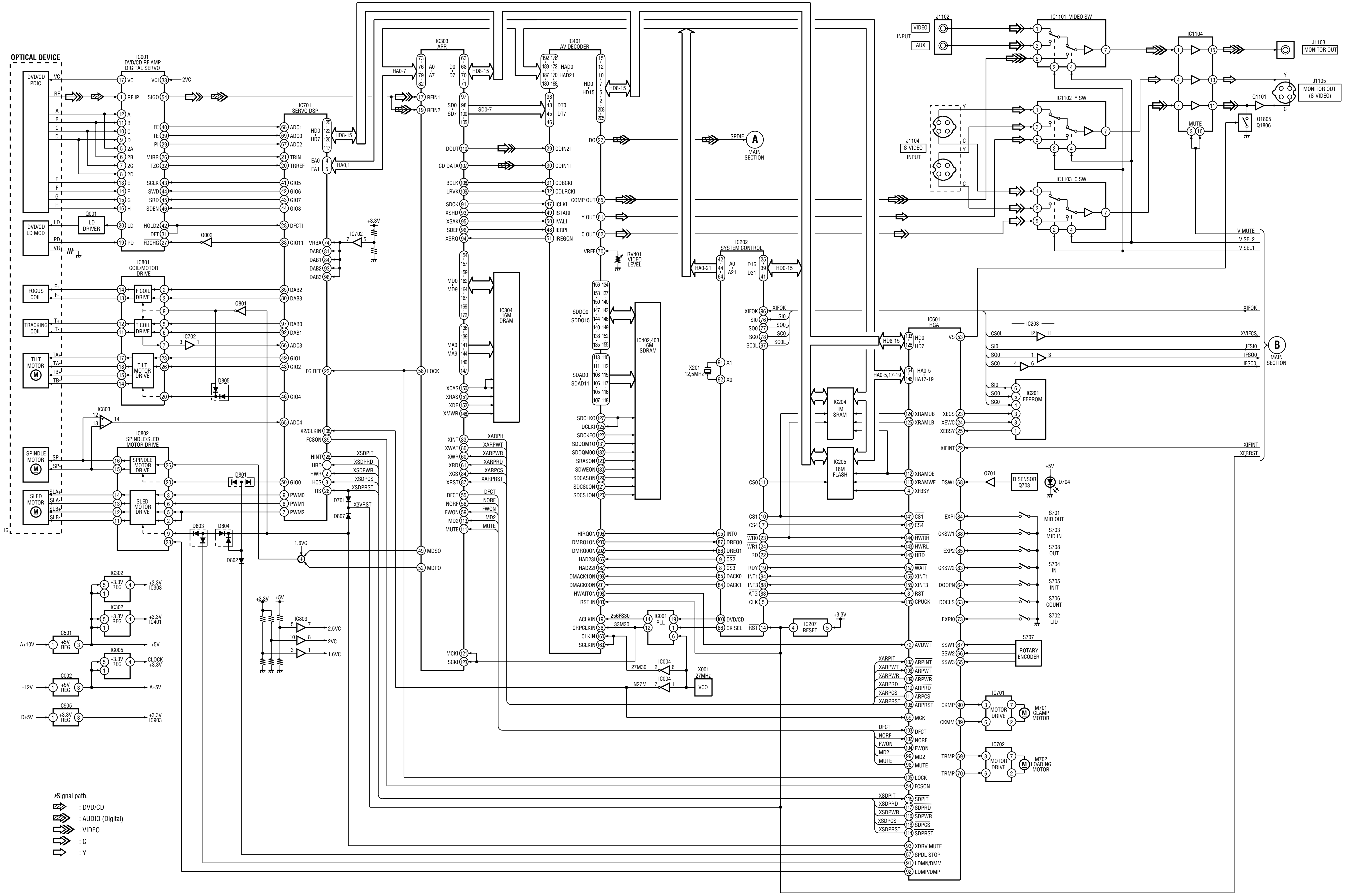
⑨


IC001 (54) DVD PLAY

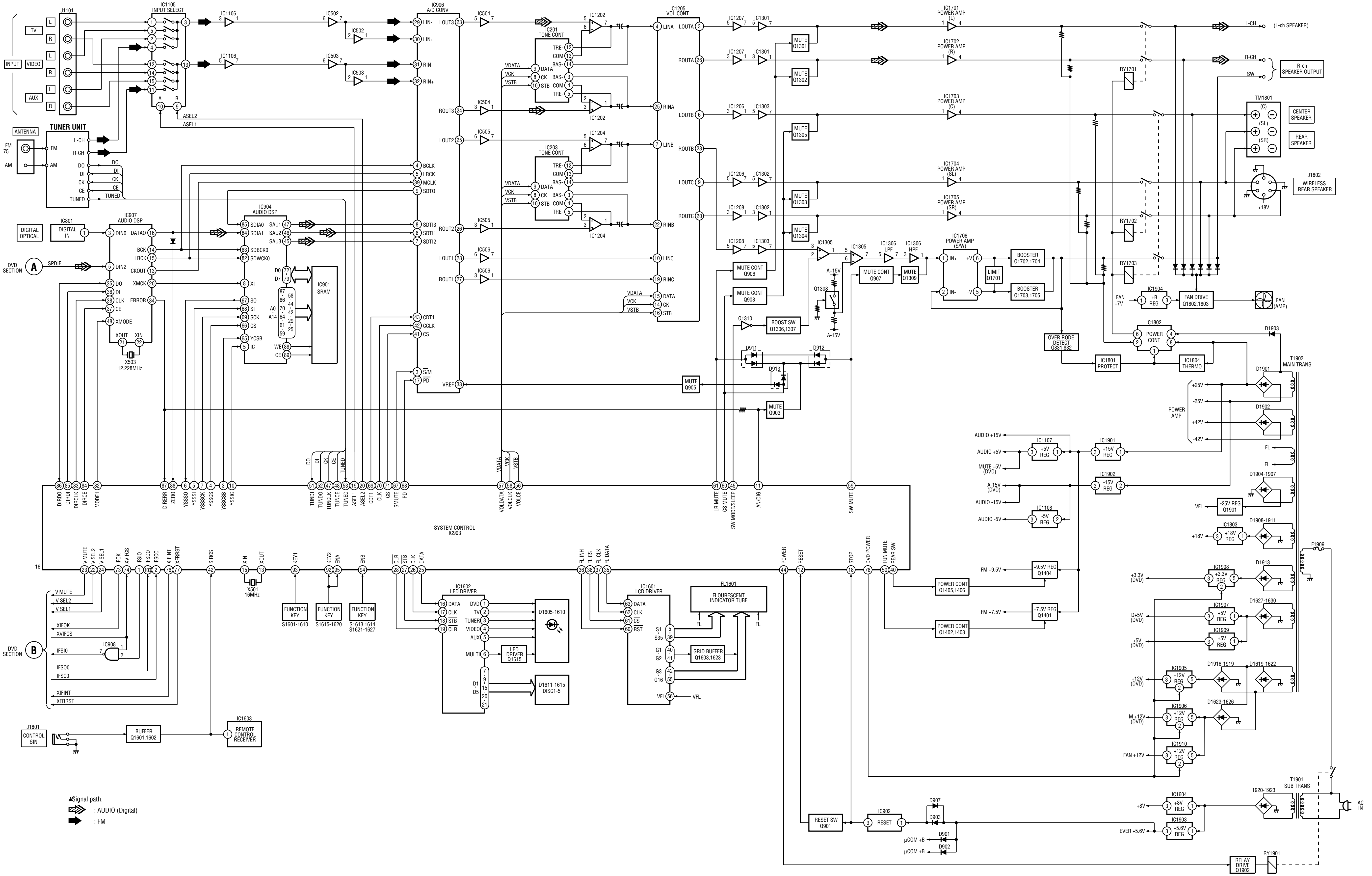
⑩


IC001 (54) CD PLAY

5-2. BLOCK DIAGRAMS
– DVD SECTION –


OPTICAL DEVICE
DVD/CD PDIC
DVD/CD LD MOD
FOCUS COIL
TRACKING COIL
TILT MOTOR
SPINDLE MOTOR
SLED MOTOR
Q001 LD DRIVER
IC001 DVD/CD RF AMP DIGITAL SERVO
IC701 SERVO DSP
IC801 COIL/MOTOR DRIVE
F COIL DRIVE
T COIL DRIVE
TILT MOTOR DRIVE
IC802 SPINDLE/SLED MOTOR DRIVE
SPINDLE MOTOR DRIVE
SLED MOTOR DRIVE
IC803
IC702
Q002
Q801
D801
D803
D804
D802
D805
D701
D807
IC303 APR
IC304 16M DRAM
IC401 AV DECODER
IC402,403 16M SDRAM
RV401 VIDEO LEVEL
IC202 SYSTEM CONTROL
X201 12.5MHz
IC204 1M SRAM
IC205 16M FLASH
IC001 PLL
IC004
X001 27MHz
VCO
IC207 RESET
IC601 HGA
IC203
IC201 EEPROM
Q701
D SENSOR Q703
D704
S701 MID OUT
S703 MID IN
S708 OUT
S704 IN
S705 INIT
S706 COUNT
S702 LID
S707 ROTARY ENCODER
IC701 MOTOR DRIVE
M701 CLAMP MOTOR
IC702 MOTOR DRIVE
M702 LOADING MOTOR
J1102
VIDEO
AUX
INPUT
J1104 S-VIDEO INPUT
IC1101 VIDEO SW
IC1102 Y SW
IC1103 C SW
IC1104
MUTE
Q1101
Q1805
Q1806
J1103 MONITOR OUT
J1105 MONITOR OUT (S-VIDEO)
V MUTE
V SEL2
V SEL1
SPDIF
A MAIN SECTION
B MAIN SECTION
XIFOK
XVIFCS
IFSI0
IFS00
IFSC0
XIFINT
XFRRST
IC302 +3.3V REG +3.3V IC303
IC302 +3.3V REG +3.3V IC401
IC501 +5V REG
A+10V
+5V
IC005 +3.3V REG CLOCK +3.3V
IC002 +5V REG
+12V
A+5V
IC905 +3.3V REG
D+5V
+3.3V IC903
IC803
2.5VC
2VC
1.6VC
Signal path.
: DVD/CD
: AUDIO (Digital)
: VIDEO
: C
: Y

– MAIN SECTION –


J1101
INPUT
TV
VIDEO
AUX
ANTENNA
TUNER UNIT
FM 75
AM
L-CH
R-CH
DO
DI
CK
CE
TUNED
IC1105 INPUT SELECT
ASEL2
ASEL1
IC1106
IC502
IC503
IC906 A/D CONV
LIN-
LIN+
RIN-
RIN+
BCLK
LRCK
MCLK
SDTO
SDTI3
SDTI1
SDTI2
CDT1
CCLK
CS
S/M
PD
VREF
IC504
IC505
IC506
LOUT3
ROUT3
LOUT2
ROUT2
LOUT1
ROUT1
IC201 TONE CONT
IC203 TONE CONT
TRE-
COM
BAS-
VDATA
VCK
VSTB
IC1202
IC1204
IC1205 VOL CONT
LINA
RINA
LINB
RINB
LINC
RINC
LOUTA
ROUTA
LOUTB
ROUTB
LOUTC
ROUTC
IC1207
IC1206
IC1208
IC1301
IC1302
IC1303
MUTE Q1301
MUTE Q1302
MUTE Q1305
MUTE Q1303
MUTE Q1304
MUTE CONT Q906
MUTE CONT Q908
BOOST SW Q1306,1307
Q1308
Q1310
D911
D912
D913
MUTE Q905
MUTE Q903
IC1305
IC1306 LPF
IC1306 HPF
MUTE CONT Q907
MUTE Q1309
IC1706 POWER AMP (S/W)
LIMIT Q1701
BOOSTER Q1702,1704
BOOSTER Q1703,1705
IC1701 POWER AMP (L)
IC1702 POWER AMP (R)
IC1703 POWER AMP (C)
IC1704 POWER AMP (SL)
IC1705 POWER AMP (SR)
RY1701
RY1702
RY1703
L-CH (L-ch SPEAKER)
R-CH
SW
R-ch SPEAKER OUTPUT
TM1801
CENTER SPEAKER
REAR SPEAKER
J1802 WIRELESS REAR SPEAKER
+18V
FAN +7V
IC1904 +8 REG
FAN DRIVE Q1802,1803
FAN (AMP)
IC1802 POWER CONT
OVER RODE DETECT Q831,832
IC1801 PROTECT
IC1804 THERMO
D1903
T1902 MAIN TRANS
D1901
D1902
POWER AMP
+25V
-25V
+42V
-42V
FL
DIGITAL OPTICAL
IC801 DIGITAL IN
IC907 AUDIO DSP
DVD SECTION A
SPDIF
X503 12.228MHz
IC904 AUDIO DSP
IC901 SRAM
SYSTEM CONTROL IC903
X501 16MHz
FUNCTION KEY S1601-1610
FUNCTION KEY S1615-1620
FUNCTION KEY S1613,1614 S1621-1627
IC1602 LED DRIVER
D1605-1610
LED DRIVER Q1615
D1611-1615 DISC1-5
IC1601 LCD DRIVER
FL1601 FLOURESCENT INDICATOR TUBE
GRID BUFFER Q1603,1623
DVD SECTION B
IC908
J1801 CONTROL SIN
BUFFER Q1601,1602
IC1603 REMOTE CONTROL RECEIVER
AUDIO +15V
AUDIO +5V
MUTE +5V (DVD)
A-15V (DVD)
AUDIO -15V
AUDIO -5V
IC1107 +5V REG
IC1108 -5V REG
IC1901 +15V REG
IC1902 -15V REG
-25V REG Q1901
IC1803 +18V REG
FM +9.5V
+9.5V REG Q1404
FM +7.5V
+7.5V REG Q1401
POWER CONT Q1405,1406
POWER CONT Q1402,1403
IC1908 +3.3V REG
IC1907 +5V REG
IC1909 +5V REG
IC1905 +12V REG
IC1906 +12V REG
IC1910 +12V REG
FAN +12V
F1909
T1901 SUB TRANS
AC IN
IC1604 +8V REG
IC1903 +5.6V REG
EVER +5.6V
RESET SW Q901
IC902 RESET
D907
D903
D901
D902
µCOM +B
RELAY DRIVE Q1902
RY1901

•Signal path.
: AUDIO (Digital)
: FM

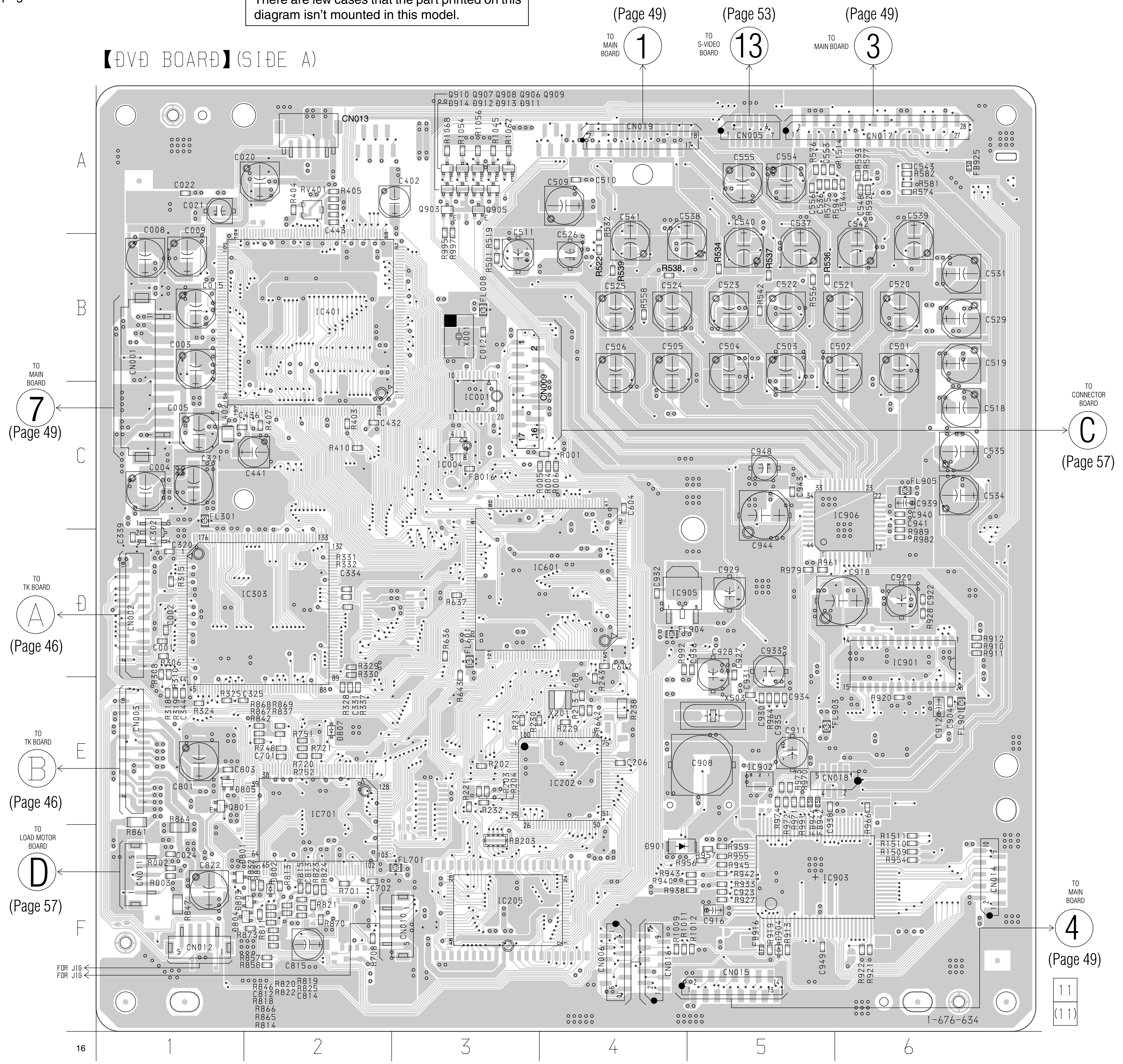
5-3. Printed Wiring Board – DVD Section –

- See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.

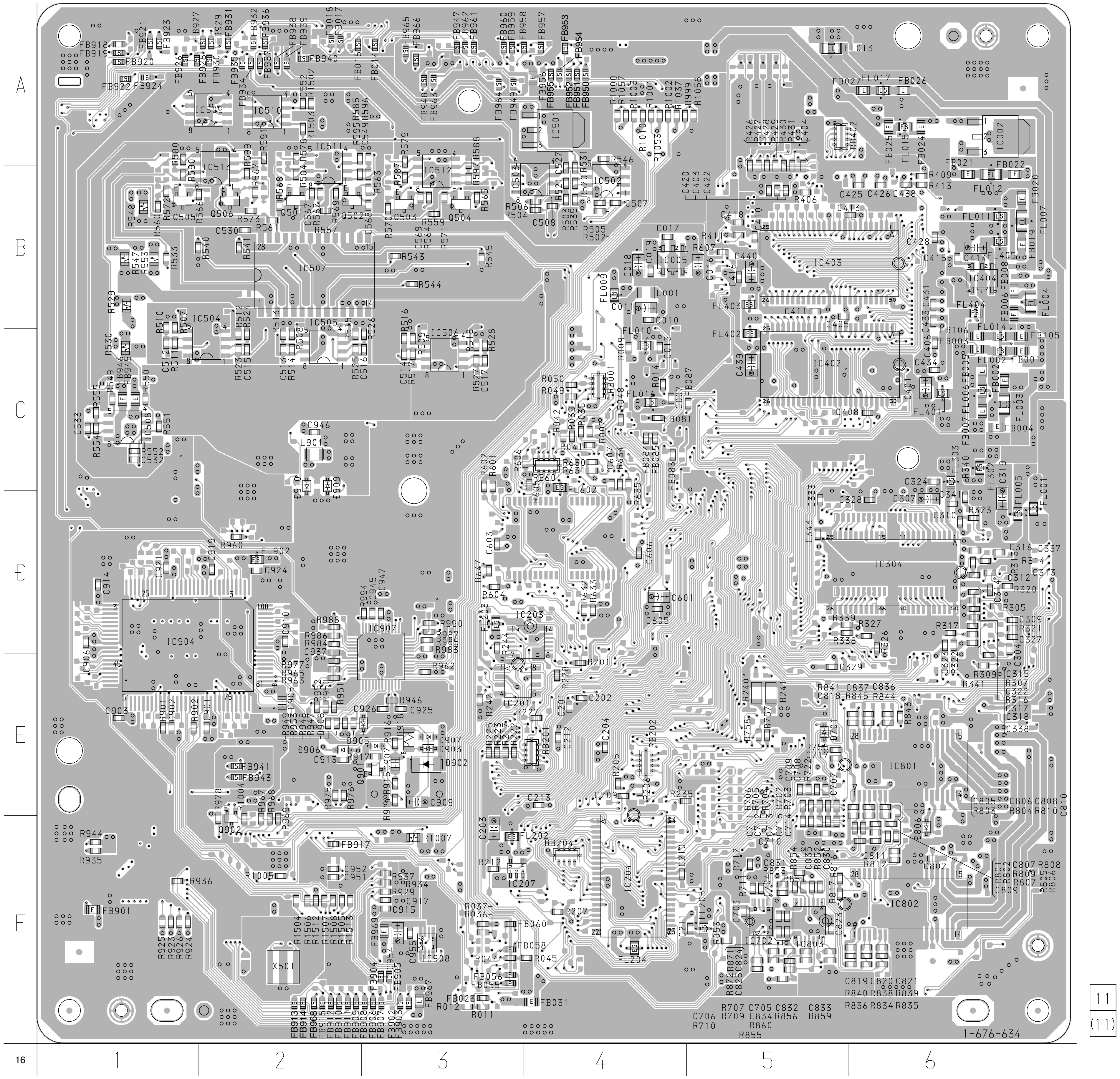
- **Semiconductor Location**

Ref. No.	Location
D801	F-1
D802	F-2
D803	F-1
D804	F-1
D805	E-1
D807	E-2
D901	F-4
D904	F-5
D911	A-3
D912	A-3
D913	A-3
D914	A-3
IC001	C-3
IC004	C-3
IC202	E-4
IC205	F-3
IC302	D-1
IC303	D-2
IC401	B-2
IC601	D-3
IC701	E-2
IC901	D-6
IC902	E-5
IC903	F-5
IC905	D-4
IC906	C-6
Q801	E-1
Q903	A-3
Q905	A-3
Q906	A-3
Q907	A-3
Q908	A-3
Q909	A-3
Q910	A-3


【DVD BOARD】(SIDE A)
(Page 49)
TO MAIN BOARD
1
(Page 53)
TO S-VIDEO BOARD
13
(Page 49)
TO MAIN BOARD
3
TO MAIN BOARD
7
(Page 49)
TO TK BOARD
A
(Page 46)
TO TK BOARD
B
(Page 46)
TO LOAD MOTOR BOARD
D
(Page 57)
TO CONNECTOR BOARD
C
(Page 57)
TO MAIN BOARD
4
(Page 49)
FOR JIG
FOR JIG
A
B
C
D
E
F
1
2
3
4
5
6
16
11
(11)
1-676-634
CN013
CN019
CN005
CN017
CN001
CN009
CN002
CN003
CN011
CN012
CN010
CN006
CN016
CN015
CN014
CN018
IC401
IC001
IC004
IC302
IC303
IC601
IC905
IC906
IC901
IC701
IC202
IC902
IC205
IC903
Q910 Q907 Q908 Q906 Q909
D914 D912 D913 D911
Q903
Q905
Q801
D801
D802
D803
D804
D805
D807
D901
D904

There are few cases that the part printed on this diagram isn't mounted in this model.

【DVD BOARD】(SIDE B)

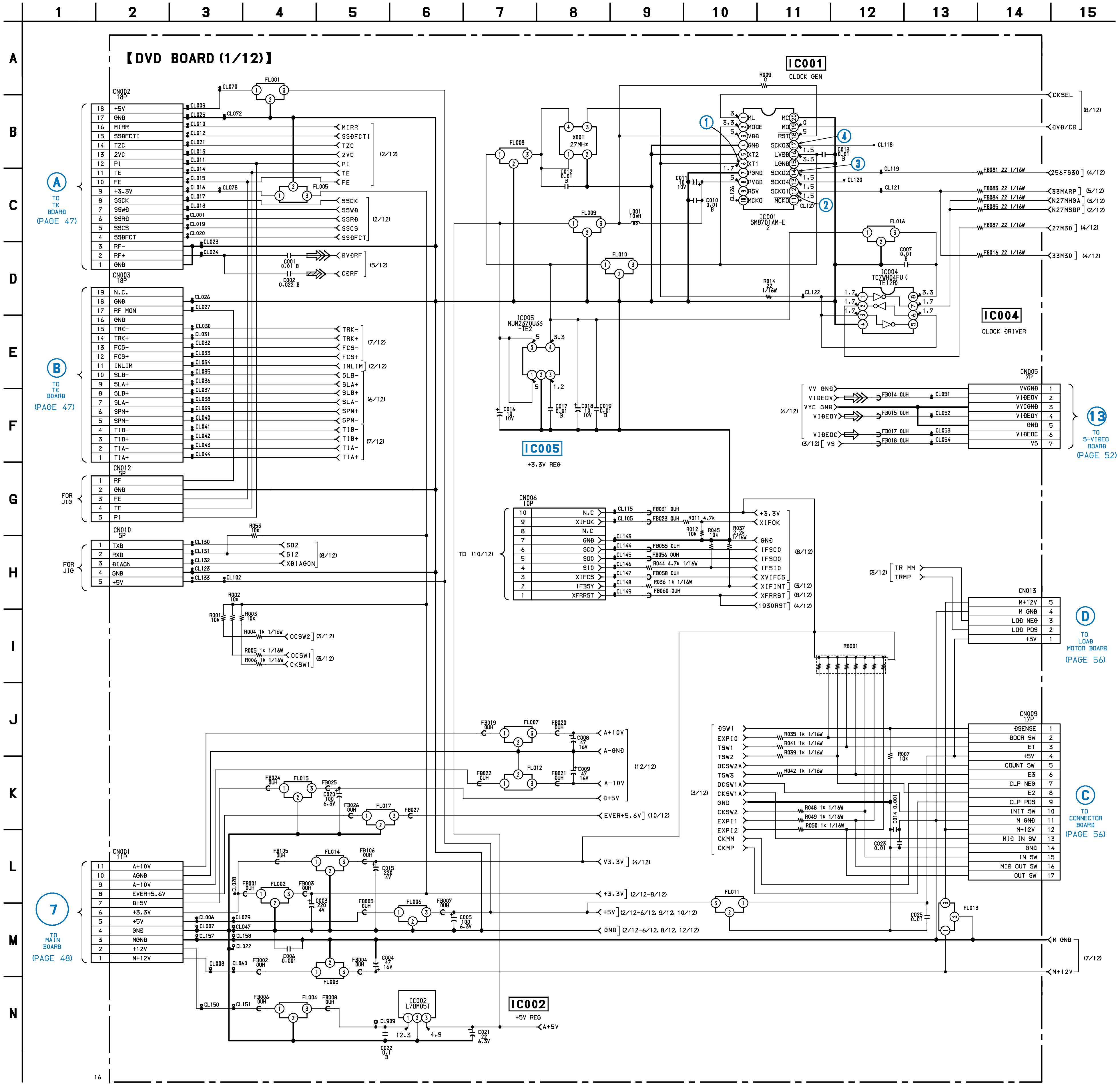


- **Semiconductor Location**

Ref. No.	Location
D701	E-5
D806	F-6
D902	E-3
D903	E-3
D905	E-2
D906	E-2
D907	E-3
D908	E-2
D909	C-2
D910	C-2
IC002	A-6
IC005	B-4
IC201	E-3
IC203	D-4
IC207	F-3
IC304	D-6
IC402	C-5
IC403	B-5
IC404	B-6
IC501	A-4
IC502	B-4
IC503	B-3
IC504	B-2
IC505	C-2
IC506	C-3
IC507	B-2
IC508	C-1
IC509	A-2
IC510	A-2
IC511	A-2
IC512	B-3
IC513	B-2
IC702	F-5
IC801	E-6
IC802	F-6
IC803	F-5
IC904	D-1
IC907	D-3
IC908	F-3
Q501	B-2
Q502	B-2
Q503	B-3
Q504	B-3
Q505	B-1
Q506	B-2
Q901	E-3
Q902	F-2

5-4. Schematic Diagram – DVD (1/12) Section –

- See page 29 for Waveforms.
- See page 67 for IC Block Diagrams.

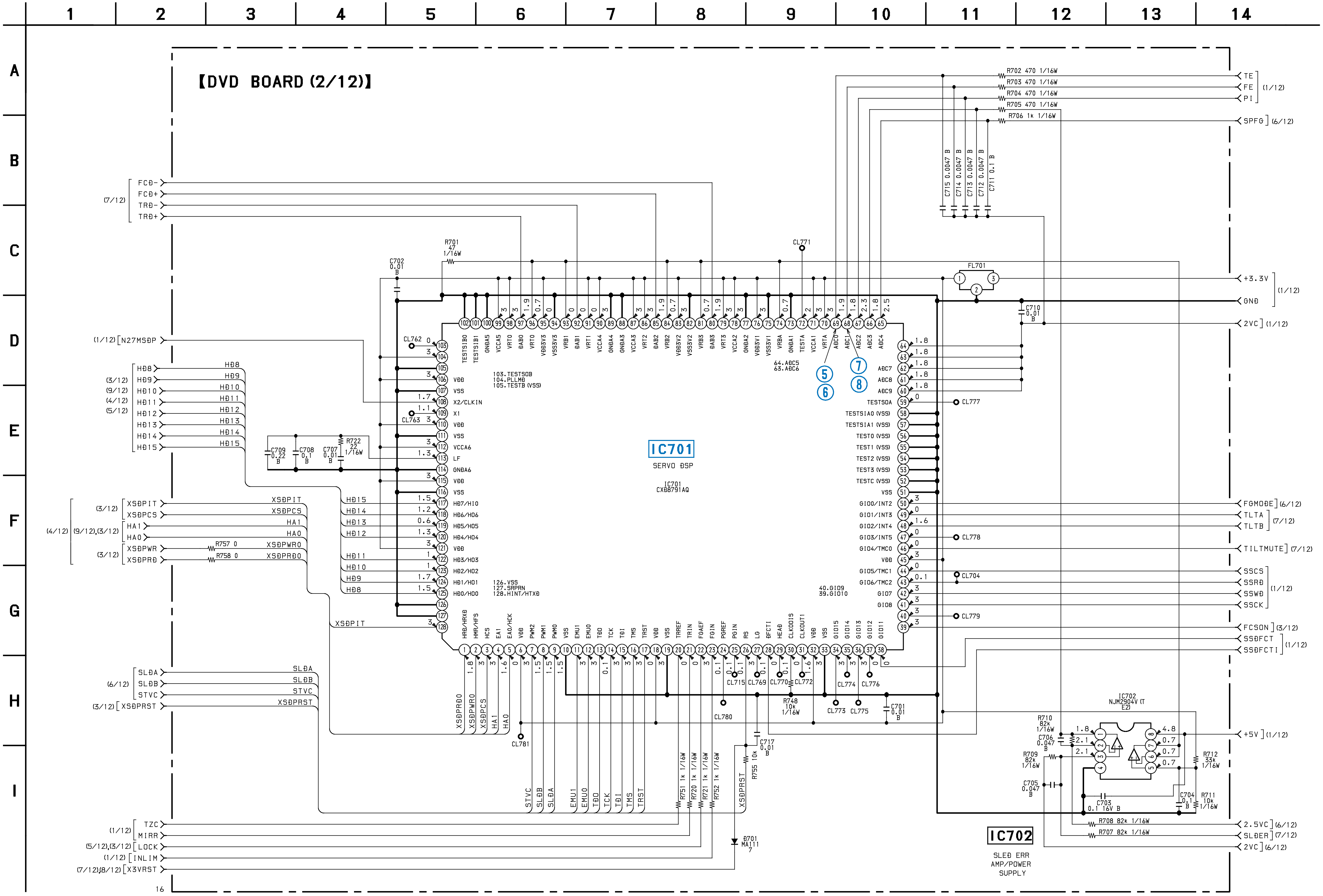

【DVD BOARD (1/12)】
IC001
CLOCK GEN
SM8701AM-E2
X001 27MHz
IC004
CLOCK DRIVER
TC7WH04FU(TE12R)
IC005
NJM2370U33-TE2
+3.3V REG
IC002
L78M05T
+5V REG
CN002 18P
CN003 19P
CN012 5P
CN010 5P
CN001 11P
CN006 10P
CN005 7P
CN013 5P
CN009 17P
RB001
A
TO TK BOARD
(PAGE 47)
B
TO TK BOARD
(PAGE 47)
FOR JIG
FOR JIG
7
TO MAIN BOARD
(PAGE 48)
13
TO S-VIDEO BOARD
(PAGE 52)
D
TO LOAD MOTOR BOARD
(PAGE 56)
C
TO CONNECTOR BOARD
(PAGE 56)
TO (10/12)
CKSEL
DVD/CD
(8/12)
256FS30 (4/12)
33MARP (5/12)
N27MHGA (3/12)
N27MSBP (2/12)
27M30 (4/12)
33M30 (4/12)
MIRR
SSDFCTI
TZC
2VC
PI
TE
FE
(2/12)
SSCK
SSWD
SSRD
SSCS
SSDFCT
DVDRF
CDRF
(5/12)
TRK-
TRK+
FCS-
FCS+
(7/12)
INLIM (2/12)
SLB-
SLB+
SLA+
SLA-
SPM+
SPM-
(6/12)
TIB-
TIB+
TIA-
TIA+
SO2
SI2
XDIAGON
OCSW2 (3/12)
OCSW1
CKSW1 (3/12)
+3.3V
XIFOK
GND
IFSCO
IFSDO
IFSIO
XVIFCS
XIFINT (3/12)
XFRRST (8/12)
I930RST (4/12)
TR MM
TRMP
VV GND
VIDEOV
VYC GND
VIDEOY
VIDEOC
VS
A+10V
A-GND
A-10V
B+5V
(12/12)
EVER+5.6V (10/12)
V3.3V (4/12)
+3.3V (2/12-8/12)
+5V (2/12-6/12, 9/12, 10/12)
GND (2/12-6/12, 8/12, 12/12)
M GND
M+12V
(7/12)
A+5V
DSW1
EXPIO
TSW1
TSW2
OCSW2A
TSW3
OCSW1A
CKSW1A
GND
CKSW2
EXPI1
EXPI2
CKMM
CKMP
DSENSE
DOOR SW
E1
+5V
COUNT SW
E3
CLP NEG
E2
CLP POS
INIT SW
M GND
M+12V
MID IN SW
GND
IN SW
MID OUT SW
OUT SW
M+12V
M GND
LOD NEG
LOD POS
+5V

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-5. Schematic Diagram – DVD (2/12) Section –

- See page 29 for Waveforms.
- See page 69 for IC Block Diagrams.

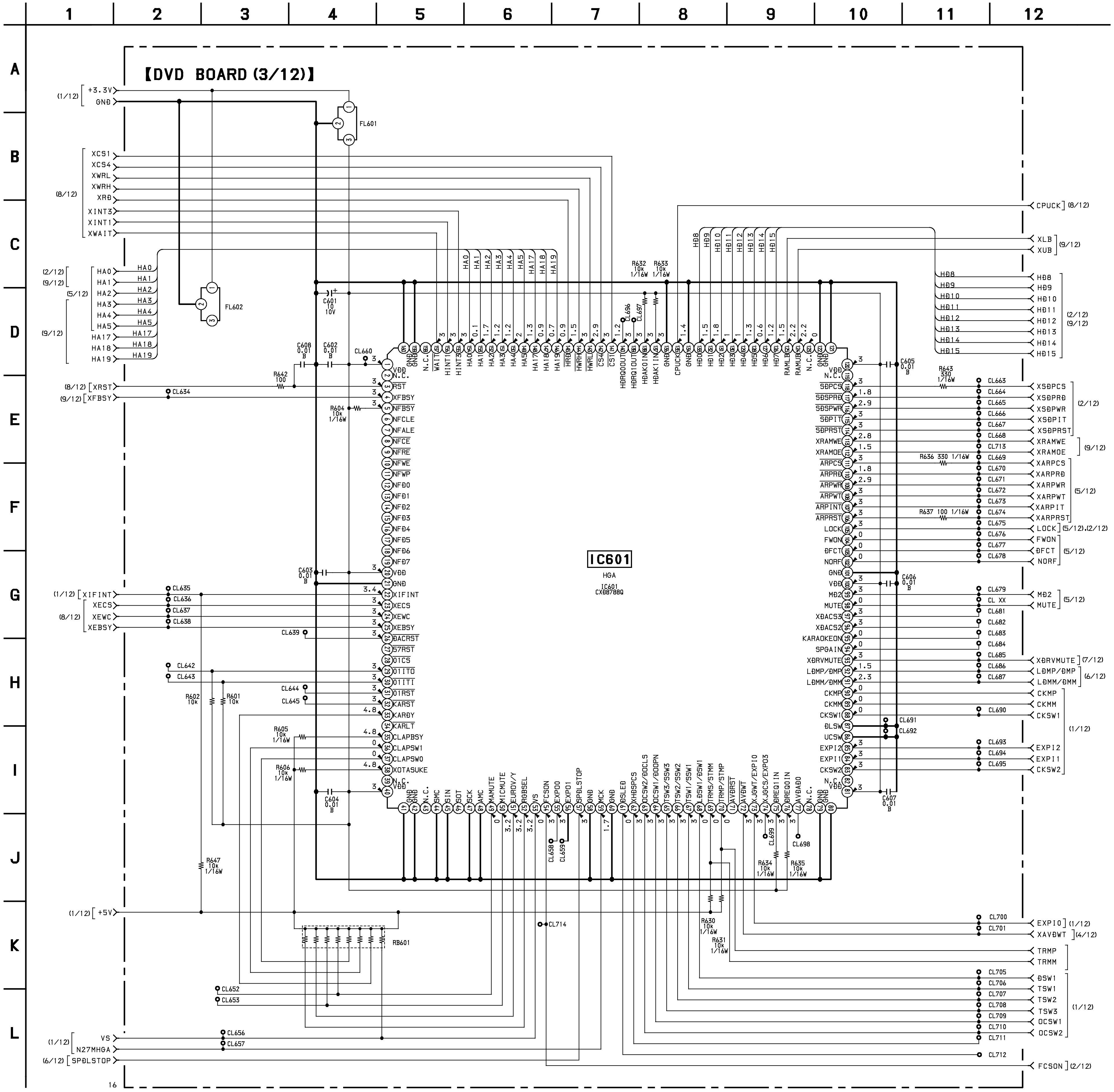

【DVD BOARD (2/12)】
IC701
SERVO DSP
IC701 CXD8791AQ
IC702
SLED ERR AMP/POWER SUPPLY
IC702 NJM2904V (T E2)
FL701
FCD− FCD+ TRD− TRD+ (7/12)
N27MSDP (1/12)
HD8 HD9 HD10 HD11 HD12 HD13 HD14 HD15 (3/12) (9/12) (4/12) (5/12)
XSDPIT XSDPCS HA1 HA0 XSDPWR XSDPRD (3/12) (4/12) (9/12),(3/12)
SLDA SLDB STVC (6/12)
XSDPRST (3/12)
TZC MIRR (1/12)
LOCK (5/12),(3/12)
INLIM (1/12)
X3VRST (7/12),(8/12)
TE FE PI (1/12)
SPFG (6/12)
+3.3V GND (1/12)
2VC (1/12)
FGMODE (6/12)
TLTA TLTB (7/12)
TILTMUTE (7/12)
SSCS SSRD SSWD SSCK (1/12)
FCSON (3/12)
SSDFCT SSDFCTI (1/12)
+5V (1/12)
2.5VC (6/12)
SLDER (7/12)
2VC (6/12)
R702 470 1/16W
R703 470 1/16W
R704 470 1/16W
R705 470 1/16W
R706 1k 1/16W
C715 0.0047 B
C714 0.0047 B
C713 0.0047 B
C712 0.0047 B
C711 0.1 B
R701 47 1/16W
C702 0.01 B
C710 0.01 B
C709 0.22 B
C708 0.1 B
C707 0.01 B
R722 22 1/16W
R757 0
R758 0
R748 10k 1/16W
C701 0.01 B
C717 0.01 B
R755 10k
R751 1k 1/16W
R720 1k 1/16W
R721 1k 1/16W
R752 1k 1/16W
D701 MA111
R710 82k 1/16W
C706 0.047 B
R709 82k 1/16W
C705 0.047 B
C703 0.1 16V B
C704 0.1 B
R711 10k 1/16W
R712 33k 1/16W
R708 82k 1/16W
R707 82k 1/16W
CL762 CL763 CL771 CL777 CL778 CL704 CL779 CL715 CL769 CL770 CL772 CL774 CL776 CL773 CL775 CL780 CL781
103.TESTSOB 104.PLLMD 105.TESTB (VSS)
126.VSS 127.SRPRN 128.HINT/HTXD
64.ADC5 63.ADC6
40.GIO9 39.GIO10
⑤ ⑥ ⑦ ⑧
1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I
16

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.

no mark: DVD

5-6. Schematic Diagram – DVD (3/12) Section –

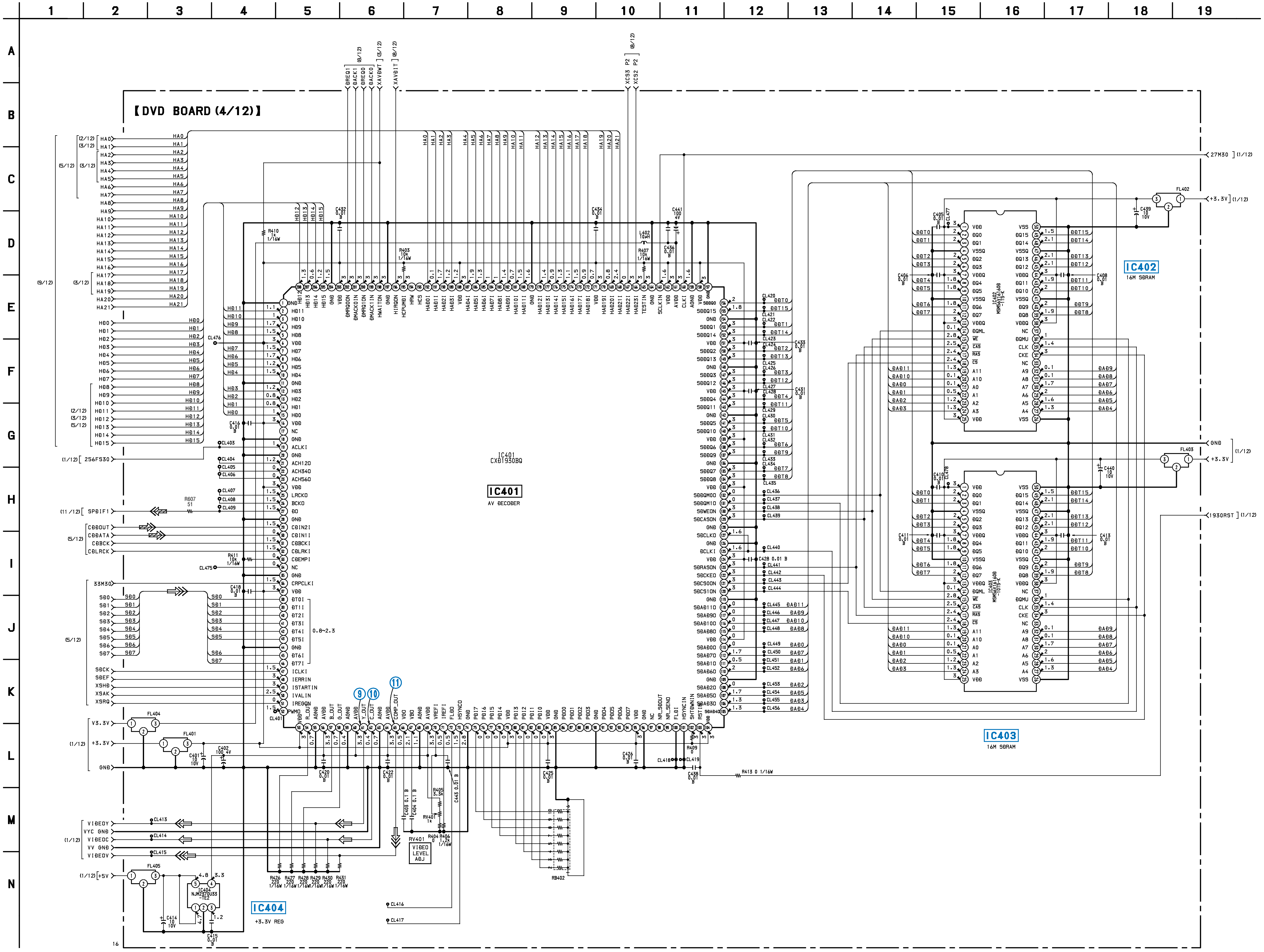

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
K
L
【DVD BOARD (3/12)】
(1/12) +3.3V
GND
FL601
FL602
(8/12) XCS1
XCS4
XWRL
XWRH
XRD
XINT3
XINT1
XWAIT
(2/12) (9/12) (5/12) (9/12)
HA0
HA1
HA2
HA3
HA4
HA5
HA17
HA18
HA19
C601 10 10V
C608 0.01 B
C602 0.01 B
CL660
R642 100
(8/12) XRST
(9/12) XFBSY
CL634
R604 10k 1/16W
C603 0.01 B
(1/12) XIFINT
(8/12) XECS
XEWC
XEBSY
CL635
CL636
CL637
CL638
CL639
CL642
CL643
R602 10k
R601 10k
CL644
CL645
R605 10k 1/16W
R606 10k 1/16W
C604 0.01 B
R647 10k 1/16W
(1/12) +5V
RB601
CL714
CL652
CL653
CL656
CL657
(1/12) VS
N27MHGA
(6/12) SPDLSTOP
16
IC601
HGA
IC601 CXD8788Q
VDD
N.C.
RST
XFBSY
NFBSY
NFCLE
NFALE
NFCE
NFRE
NFWE
NFWP
NFD0
NFD1
NFD2
NFD3
NFD4
NFD5
NFD6
NFD7
GND
XIFINT
XECS
XEWC
XEBSY
DACRST
S7RST
O1CS
O1ITO
O1ITI
O1RST
KARST
KARDY
KARLT
CLAPBSY
CLAPSW1
CLAPSW0
XOTASUKE
WAIT
HINT1
HINT3
HA0
HA1
HA2
HA3
HA4
HA5
HA17
HA18
HA19
HRD
HWRH
HWRL
CS4
CS1
HDRQ0OUT
HDRQ1OUT
HDAK0IN
HDAK1IN
CPUCK
HD0
HD1
HD2
HD3
HD4
HD5
HD6
HD7
RAMLB
RAMUB
R632 10k 1/16W
R633 10k 1/16W
CL696
CL697
HD8
HD9
HD10
HD11
HD12
HD13
HD14
HD15
C605 0.01 B
R643 330 1/16W
SDPCS
SDSPRD
SDSPWR
SDPIT
SDPRST
XRAMWE
XRAMOE
ARPCS
ARPRD
ARPWR
ARPWT
ARPINT
ARPRST
LOCK
FWON
DFCT
NORF
MD2
MUTE
XDACS3
XDACS2
KARAOKEON
SPGAIN
XDRVMUTE
LDMP/DMP
LDMM/DMM
CKMP
CKMM
CKSW1
DLSW
UCSW
EXPI2
EXPI1
CKSW2
C606 0.01 B
C607 0.01 B
R636 330 1/16W
R637 100 1/16W
CL663
CL664
CL665
CL666
CL667
CL668
CL713
CL669
CL670
CL671
CL672
CL673
CL674
CL675
CL676
CL677
CL678
CL679
CL XX
CL681
CL682
CL683
CL684
CL685
CL686
CL687
CL690
CL691
CL692
CL693
CL694
CL695
CPUCK (8/12)
XLB
XUB (9/12)
HD8
HD9
HD10
HD11
HD12
HD13
HD14
HD15 (2/12) (9/12)
XSDPCS
XSDPRD
XSDPWR
XSDPIT
XSDPRST (2/12)
XRAMWE
XRAMOE (9/12)
XARPCS
XARPRD
XARPWR
XARPWT
XARPIT
XARPRST (5/12)
LOCK (5/12),(2/12)
FWON
DFCT (5/12)
NORF
MD2
MUTE (5/12)
XDRVMUTE (7/12)
LDMP/DMP
LDMM/DMM (6/12)
CKMP
CKMM
CKSW1
EXPI2
EXPI1
CKSW2 (1/12)
SMC
SIN
SCK
SDT
AMC
AMUTE
MICMUTE
EUROV/Y
RGBSEL
VS
FCSON
EXPO0
EXPO1
SPDLSTOP
MCK
BSLED
XHDSPCS
OCSW2/DOCLS
OCSW1/DOOPN
TSW3/SSW3
TSW2/SSW2
TSW1/SSW1
LDSW1/DSW1
TRMS/STMM
TRMP/STMP
XAVDRST
XAVDWT
XJDWT/EXPI0
XJDCS/EXPO3
DREQ0IN
AVDADO
CL658
CL659
CL699
CL698
R634 10k 1/16W
R635 10k 1/16W
R630 10k 1/16W
R631 10k 1/16W
CL700
CL701
EXPI0 (1/12)
XAVDWT (4/12)
TRMP
TRMM
CL705
CL706
CL707
CL708
CL709
CL710
CL711
DSW1
TSW1
TSW2
TSW3
OCSW1
OCSW2 (1/12)
CL712
FCSON (2/12)

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-7. Schematic Diagram – DVD (4/12) Section –

- See page 29 for Waveforms.
- See page 68 for IC Block Diagrams.

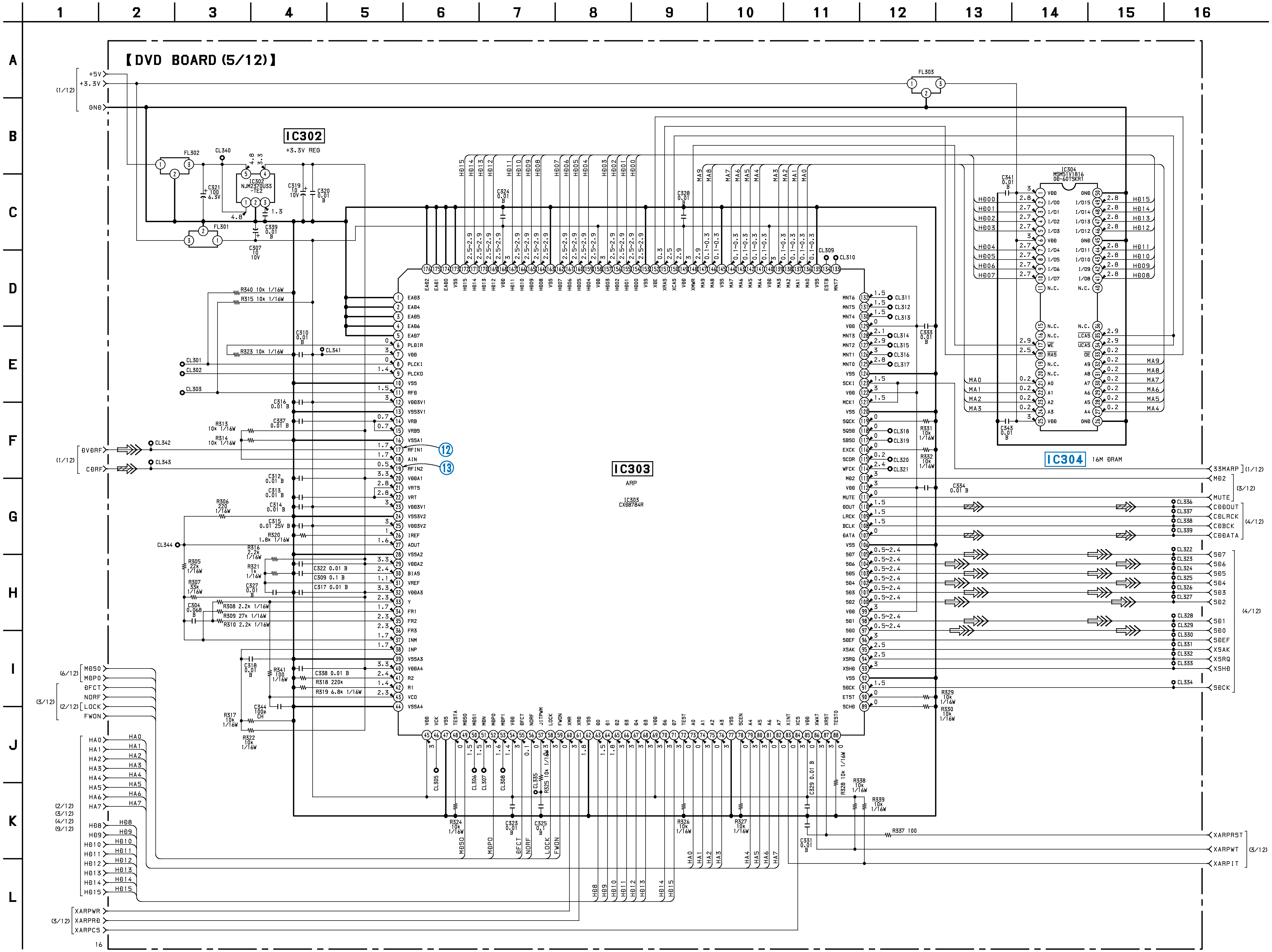

【DVD BOARD (4/12)】
IC401
CXD1930BQ
AV DECODER
IC402
16M SDRAM
IC403
16M SDRAM
IC404
NJM2870U33-TE2
+3.3V REG
VIDEO LEVEL ADJ
RV401
27M30 (1/12)
+3.3V (1/12)
GND
1930RST (1/12)
256FS30 (1/12)
SPDIF1 (11/12)
VIDEOY
VYC GND
VIDEOC
VV GND
VIDEOV
+5V (1/12)
V3.3V
+3.3V
FL401
FL402
FL403
FL404
FL405
RB402

NOTE
- Voltages and waveforms are dc with respect to ground under no-signal conditions.

no mark: DVD

5-8. Schematic Diagram – DVD (5/12) Section –

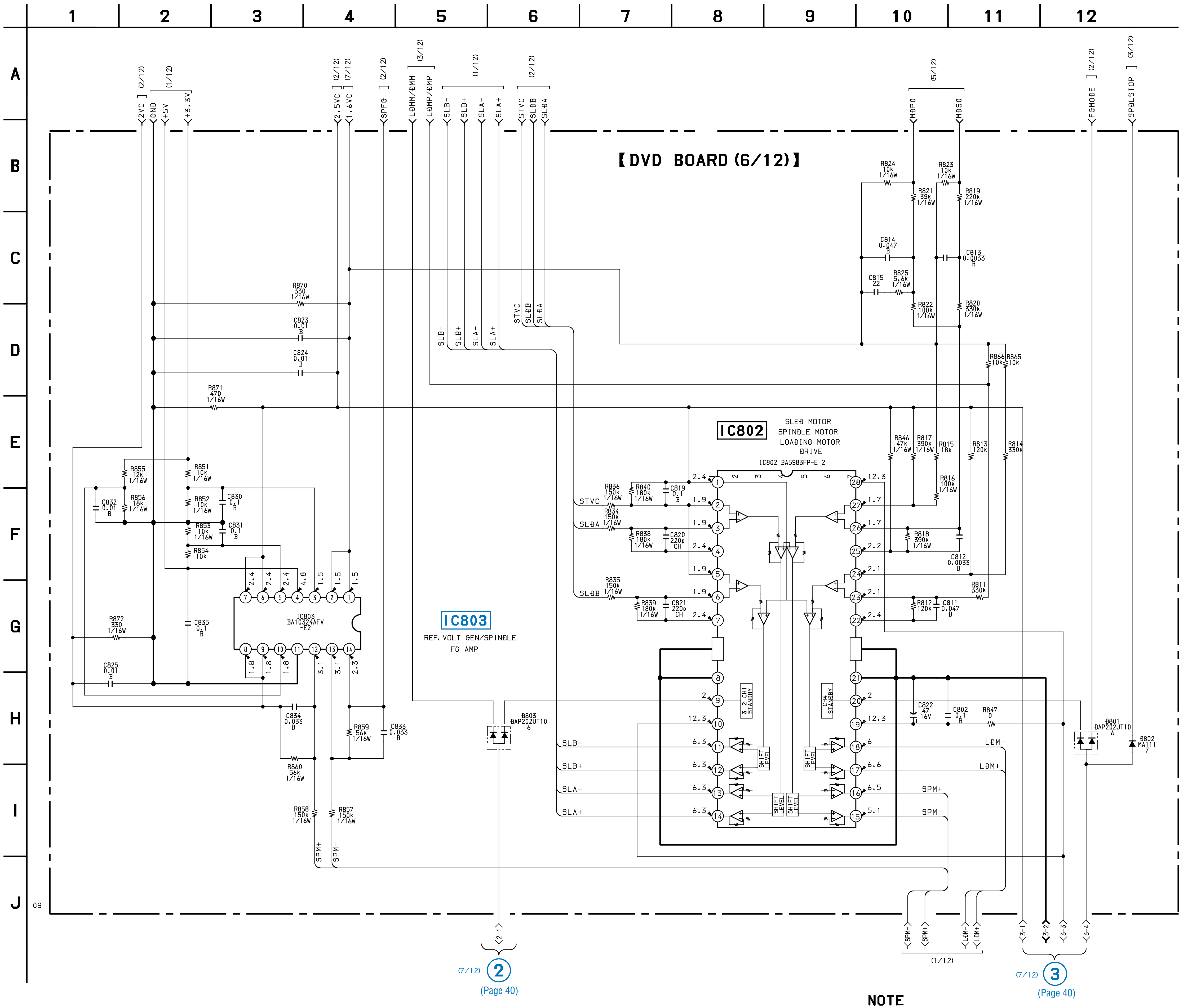
- See page 29 for Waveforms.
- See page 68 for IC Block Diagrams.


【DVD BOARD (5/12)】
IC302
+3.3V REG
IC302 NJM2370U33-TE2
IC303
ARP
IC303 CXD8784R
IC304
16M DRAM
IC304 MSM51V18160B-60TSKR1
FL301
FL302
FL303
+5V
+3.3V
GND
(1/12)
DVDRF
CDRF
MDS0
MDP0
DFCT
NDRF
LOCK
FWDN
(6/12)
(3/12)
(2/12)
HA0
HA1
HA2
HA3
HA4
HA5
HA6
HA7
HD8
HD9
HD10
HD11
HD12
HD13
HD14
HD15
XARPWR
XARPRD
XARPCS
33MARP
MD2
MUTE
CDDOUT
CDLRCK
CDBCK
CDDATA
(4/12)
SD7
SD6
SD5
SD4
SD3
SD2
SD1
SD0
SDEF
XSAK
XSRQ
XSHD
SDCK
XARPRST
XARPWT
XARPIT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K
L

NOTE
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-9. Schematic Diagram – DVD (6/12) Section –

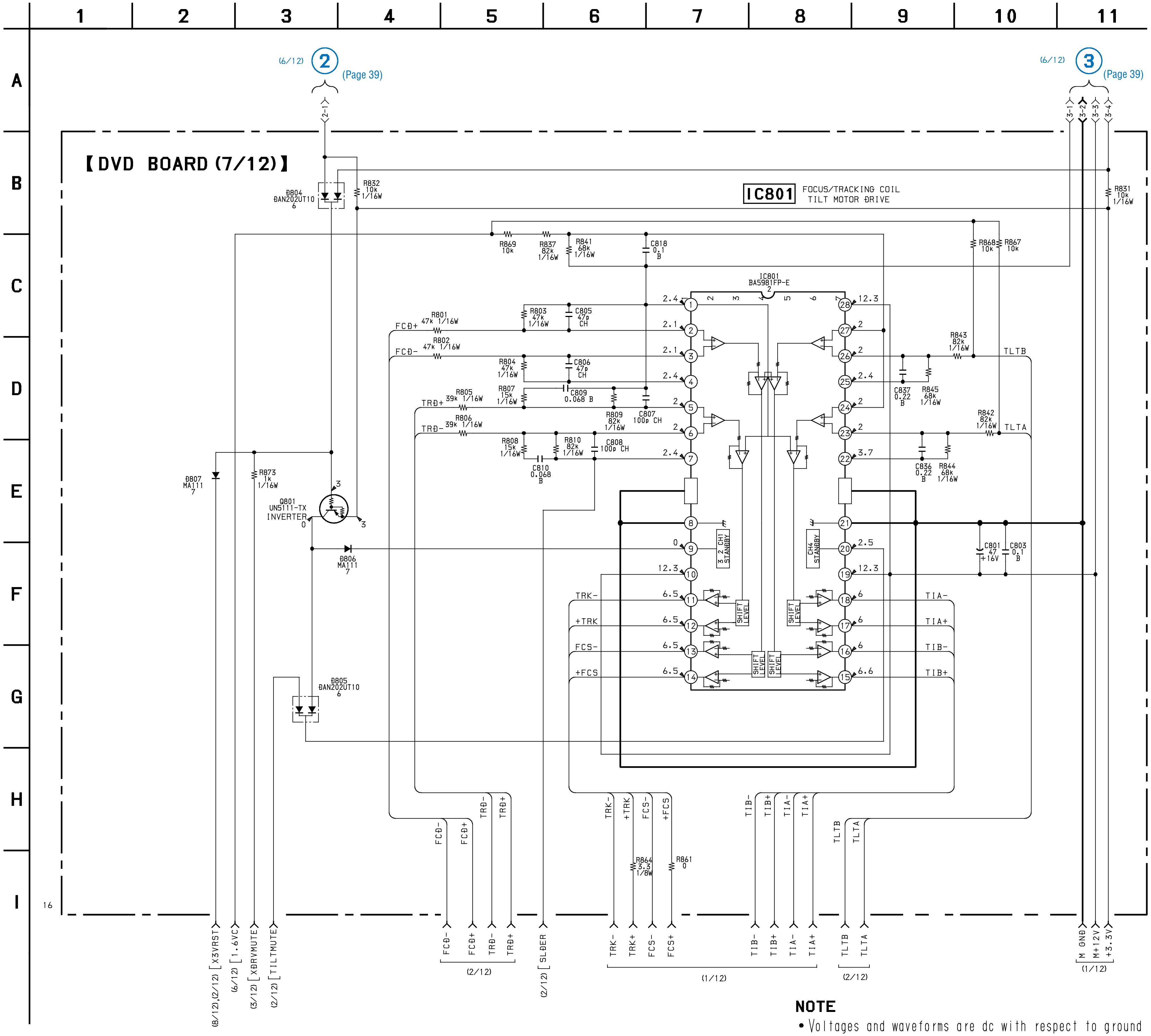
• See page 69 for IC Block Diagrams.


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
【DVD BOARD (6/12)】
2VC (2/12)
GND
+5V
+3.3V (1/12)
2.5VC (2/12)
1.6VC (7/12)
SPFG (2/12)
LDMM/DMM
LDMP/DMP (3/12)
SLB-
SLB+
SLA-
SLA+ (1/12)
STVC
SLDB
SLDA (2/12)
MDPO
MDSO (5/12)
FGMODE (2/12)
SPDLSTOP (3/12)
IC802
SLED MOTOR
SPINDLE MOTOR
LOADING MOTOR
DRIVE
IC802 BA5983FP-E 2
IC803
REF. VOLT GEN/SPINDLE
FG AMP
IC803
BA10324AFV
-E2
R870 330 1/16W
C823 0.01 B
C824 0.01 B
R871 470 1/16W
R855 12k 1/16W
R856 18k 1/16W
C832 0.01 B
R851 10k 1/16W
R852 10k 1/16W
R853 10k 1/16W
R854 10k
C830 0.1 B
C831 0.1 B
C835 0.1 B
R872 330 1/16W
C825 0.01 B
C834 0.033 B
R860 56k 1/16W
R859 56k 1/16W
C833 0.033 B
R858 150k 1/16W
R857 150k 1/16W
D803 DAP202UT10
D801 DAP202UT10
D802 MA111
R824 10k 1/16W
R823 10k 1/16W
R821 39k 1/16W
R819 220k 1/16W
C814 0.047 B
C813 0.0033 B
C815 22
R825 5.6k 1/16W
R822 100k 1/16W
R820 330k 1/16W
R866 10k
R865 10k
R846 47k 1/16W
R817 390k 1/16W
R815 18k
R813 120k
R814 330k
R816 100k 1/16W
R818 390k 1/16W
C812 0.0033 B
R811 330k
R812 120k
C811 0.047 B
R836 150k 1/16W
R840 180k 1/16W
C819 0.1 B
R834 150k 1/16W
R838 180k 1/16W
C820 220p CH
R835 150k 1/16W
R839 180k 1/16W
C821 220p CH
C822 47 16V
C802 0.1 B
R847 0
STVC
SLDA
SLDB
SLB-
SLB+
SLA-
SLA+
LDM-
LDM+
SPM+
SPM-
CH1 STANDBY
CH4 STANDBY
SHIFT LEVEL
2.4
1.9
12.3
1.7
2.2
2.1
6.3
6.6
6.5
5.1
6
2
1.8
3.1
2.3
4.8
1.5
09
2-1
SPM-
SPM+
LDM-
LDM+
3-1
3-2
3-3
3-4
(1/12)
(7/12) ②
(Page 40)
(7/12) ③
(Page 40)

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-10. Schematic Diagram – DVD (7/12) Section –

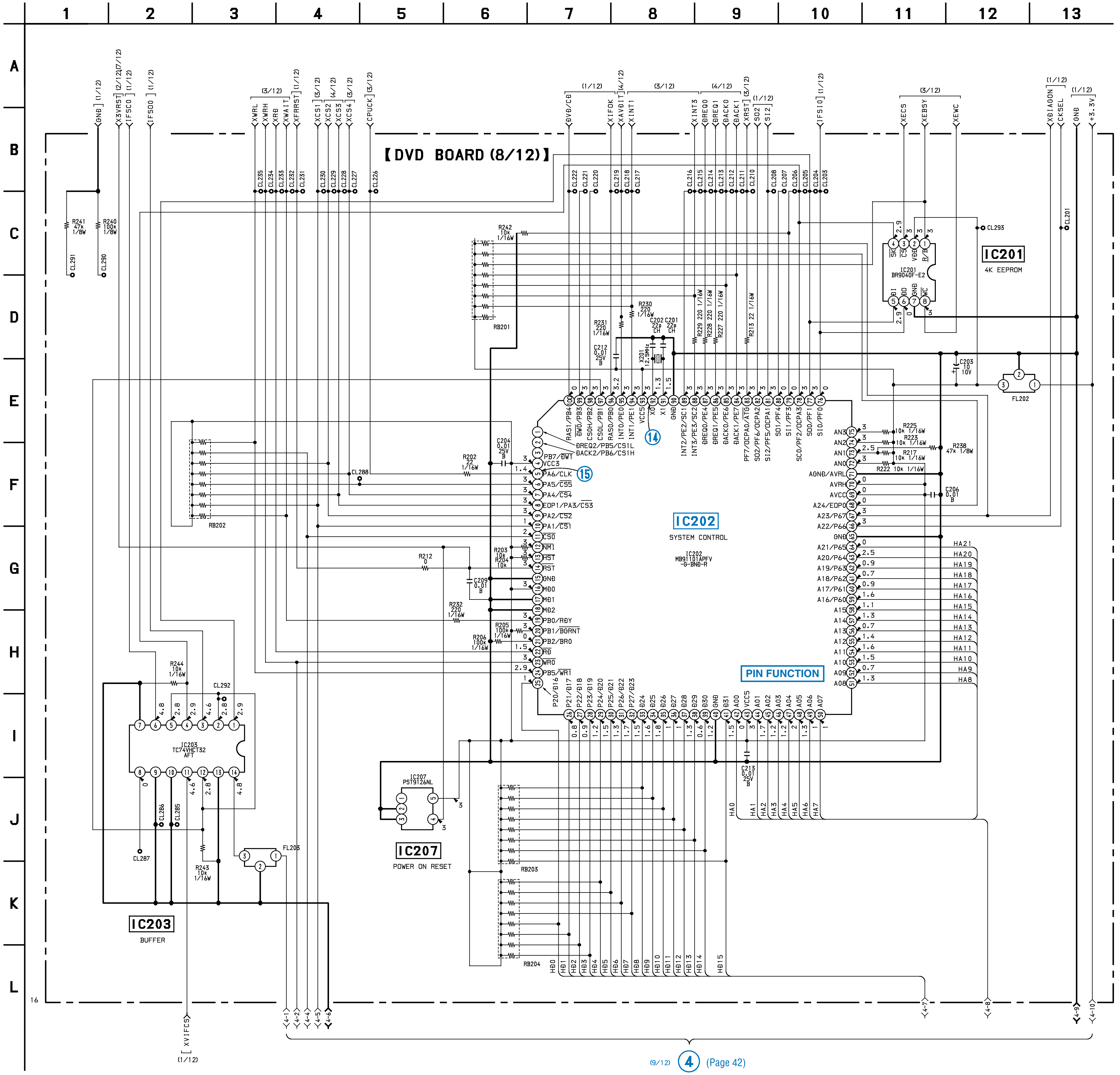

1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
(6/12) ② (Page 39)
(6/12) ③ (Page 39)
2-1
3-1
3-2
3-3
3-4
【DVD BOARD (7/12)】
IC801 FOCUS/TRACKING COIL TILT MOTOR DRIVE
IC801 BA5981FP-E
D804 DAN202UT10
R832 10k 1/16W
R831 10k 1/16W
R869 10k
R837 82k 1/16W
R841 68k 1/16W
C818 0.1 B
R868 10k
R867 10k
R801 47k 1/16W
R802 47k 1/16W
R803 47k 1/16W
C805 47p CH
R804 47k 1/16W
C806 47p CH
R805 39k 1/16W
R806 39k 1/16W
R807 15k 1/16W
C809 0.068 B
R809 82k 1/16W
C807 100p CH
R808 15k 1/16W
R810 82k 1/16W
C808 100p CH
C810 0.068 B
R843 82k 1/16W
R845 68k 1/16W
C837 0.22 B
R842 82k 1/16W
C836 0.22 B
R844 68k 1/16W
C801 47 16V
C803 0.1 B
D807 MA111
R873 1k 1/16W
Q801 UN5111-TX INVERTER
D806 MA111
D805 DAN202UT10
R864 3.3 1/8W
R861 0
FCD+
FCD-
TRD+
TRD-
TLTB
TLTA
TRK-
+TRK
FCS-
+FCS
TIA-
TIA+
TIB-
TIB+
STANDBY CH1 CH2
CH4 STANDBY
SHIFT LEVEL
2.4
2.1
2.1
2.4
2
2
2.4
0
12.3
6.5
6.5
6.5
6.5
12.3
2
2
2.4
2
2
3.7
2.5
12.3
6
6
6
6.6
16
(8/12),(2/12) X3VRST
(6/12) 1.6VC
(3/12) XDRVMUTE
(2/12) TILTMUTE
FCD-
FCD+
TRD-
TRD+
(2/12)
(2/12) SLDER
TRK-
TRK+
FCS-
FCS+
TIB-
TIB+
TIA-
TIA+
(1/12)
TLTB
TLTA
(2/12)
M GND
M+12V
+3.3V
(1/12)

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-11. Schematic Diagram – DVD (8/12) Section –

- See page 29 for Waveforms.
- See page 67 for IC Block Diagrams.
- See page 63 for IC Pin Functions.

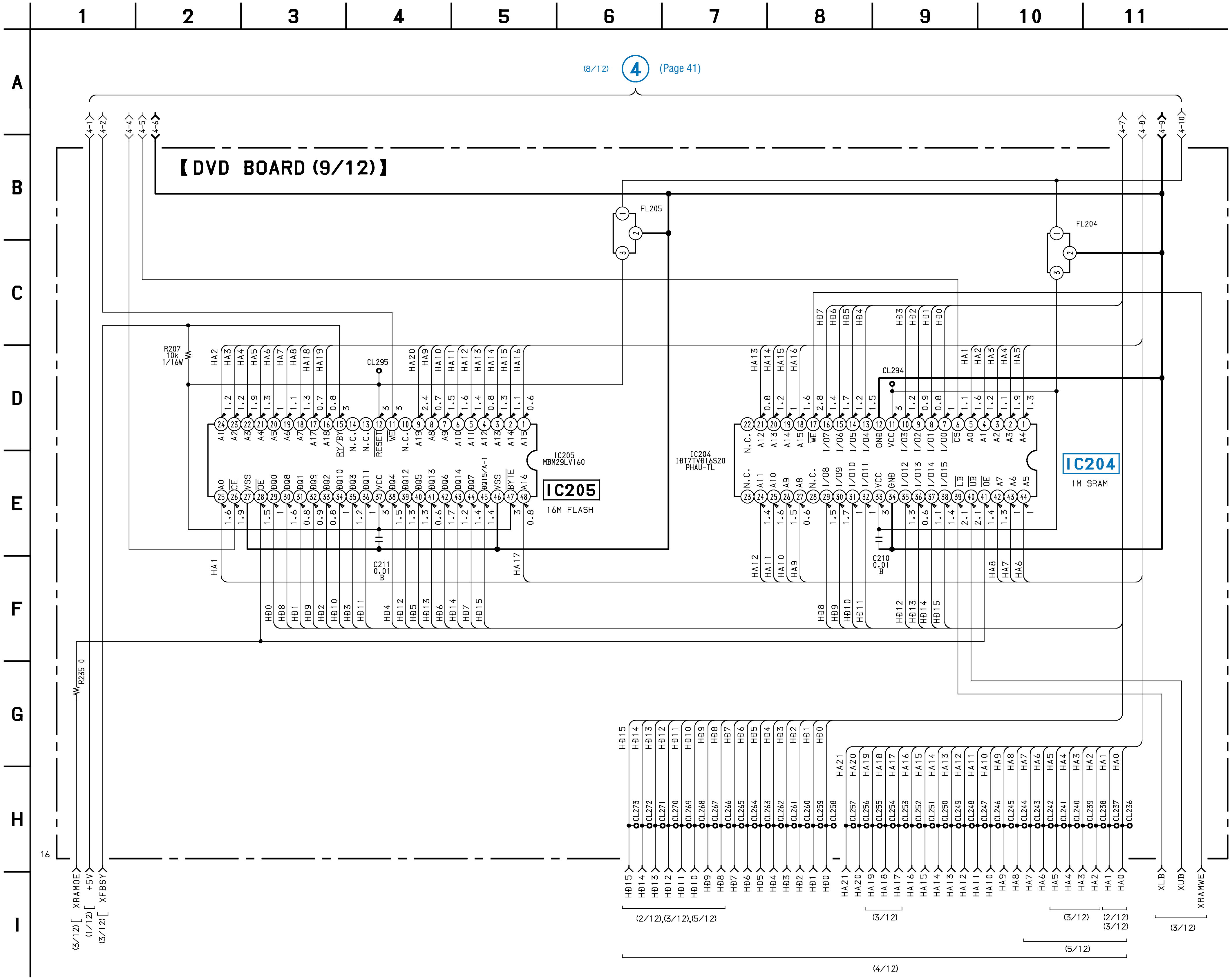

1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I J K L
【DVD BOARD (8/12)】
IC201
4K EEPROM
IC201 BR9040F-E2
IC202
SYSTEM CONTROL
IC202 MB91101APFV -G-BND-R
IC203
BUFFER
IC203 TC74VHCT32 AFT
IC207
POWER ON RESET
IC207 PST9126NL
PIN FUNCTION
RB201
RB202
RB203
RB204
FL202
FL203
X201 12.5MHz
⑭
⑮
XVIFCS
(1/12)
(9/12)
4
(Page 42)

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-12. Schematic Diagram – DVD (9/12) Section –

- See page 68 for IC Block Diagrams.

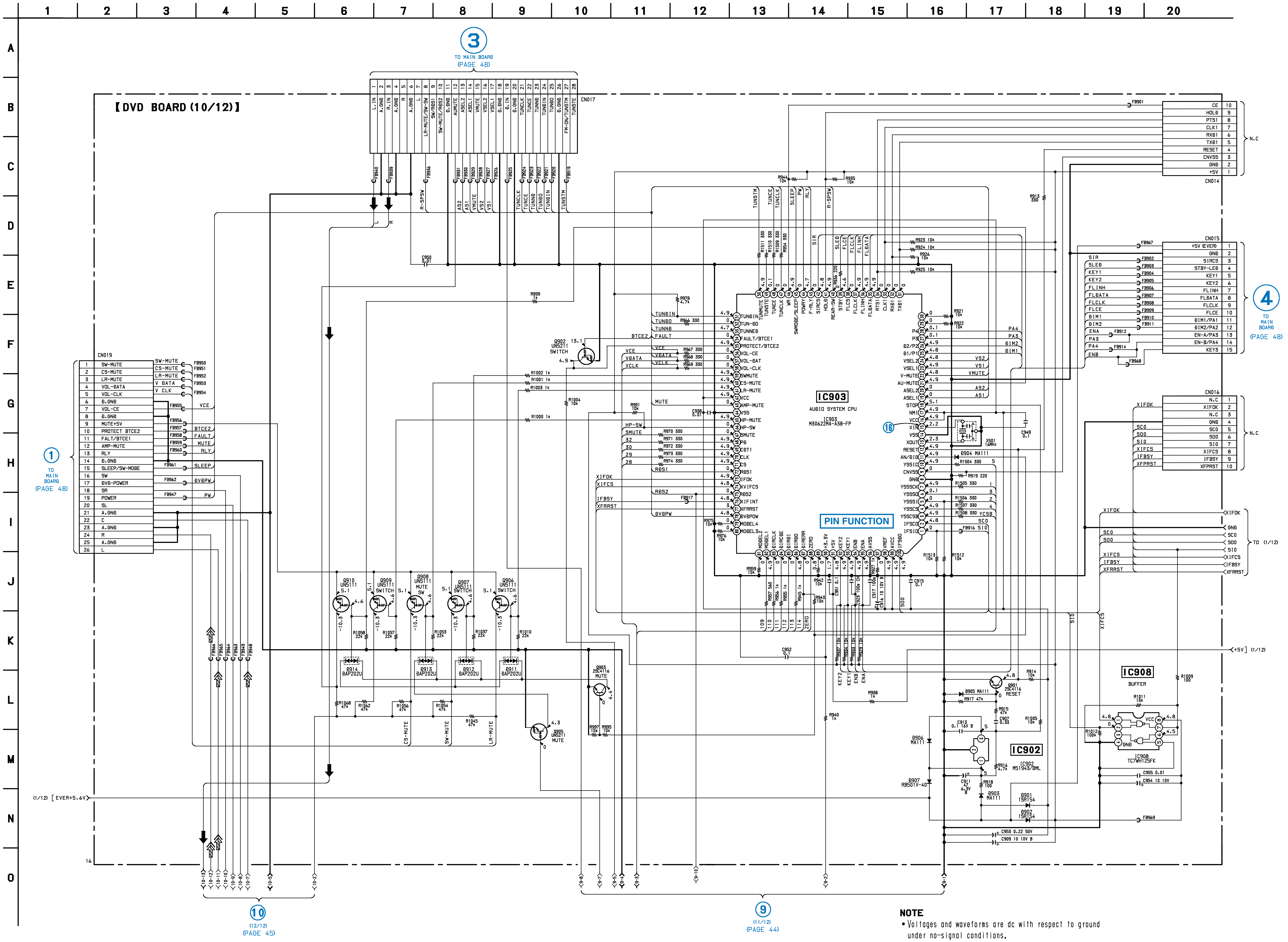

(8/12) 4 (Page 41)
【DVD BOARD (9/12)】
IC205
MBM29LV160
16M FLASH
IC204
IDT71V016S20
PHAU-TL
1M SRAM
FL205
FL204
R207
10k
1/16W
CL295
CL294
C211
0.01
B
C210
0.01
B
R235 0
XRAMOE
+5V
XFBSY
(3/12)
(1/12)
(3/12)
XLB
XUB
XRAMWE
(2/12),(3/12),(5/12)
(3/12)
(2/12)
(5/12)
(4/12)
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-13. Schematic Diagram – DVD (10/12) Section –

- See page 29 for Waveforms.
- See page 65 for IC Pin Functions.



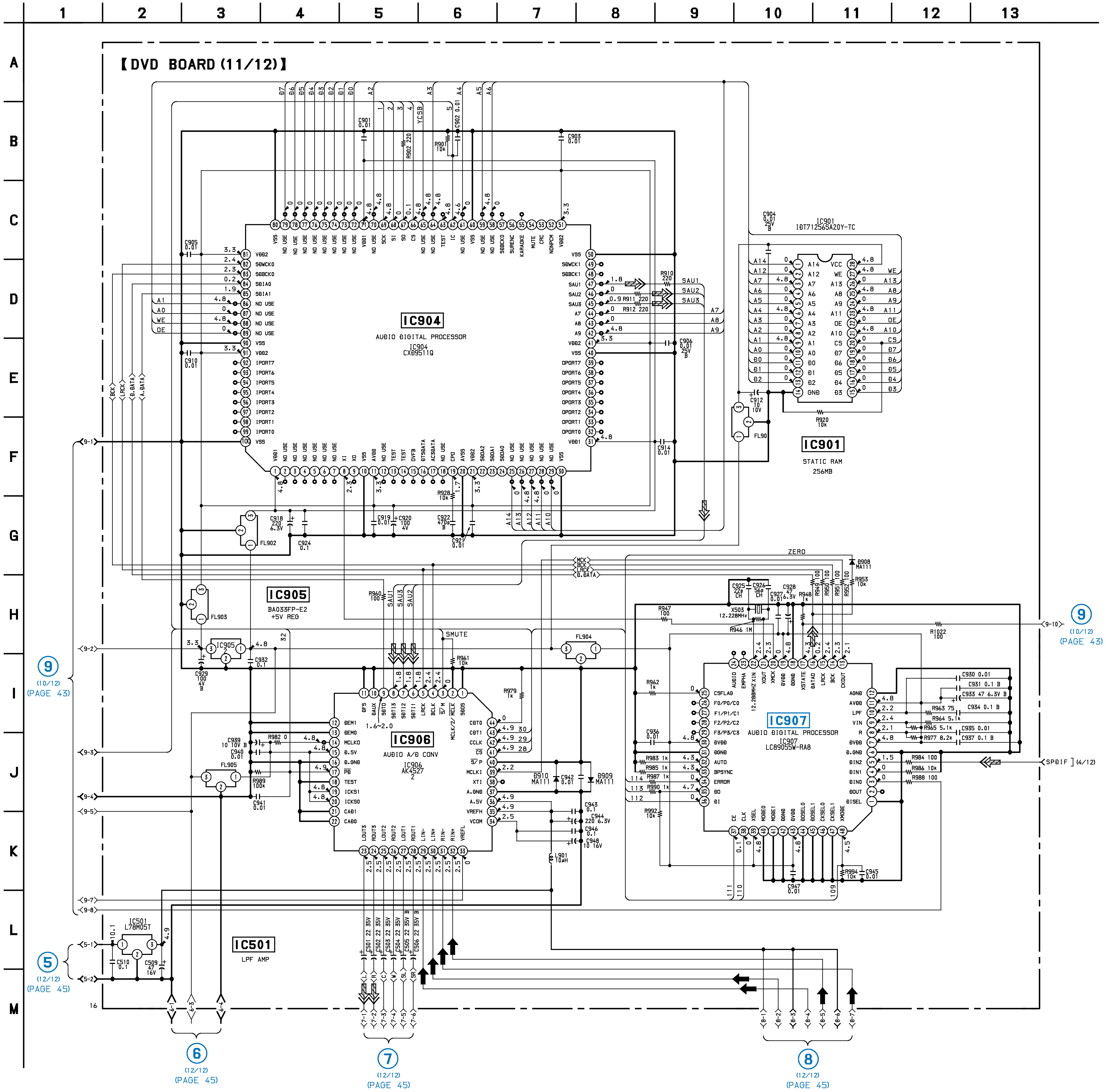
[DVD BOARD (10/12)]
③ TO MAIN BOARD (PAGE 48)
CN017
CN019
① TO MAIN BOARD (PAGE 48)
CN014
N.C
CN015
④ TO MAIN BOARD (PAGE 48)
CN016
N.C
TO (1/12)
+5V] (1/12)
(1/12) [EVER+5.6V]
IC903
AUDIO SYSTEM CPU
IC903 M30622MA-A38-FP
PIN FUNCTION
⑯
X501 16MHz
IC902
IC902 M51943/BML
IC908
BUFFER
IC908 TC7WH125FK
Q902 UN5211 SWITCH
Q910 UN5111
Q909 UN5111 SWITCH
Q908 UN5111 MUTE
Q907 UN5111 SWITCH
Q906 UN5111 SWITCH
Q903 2SC4116 MUTE
Q905 UN5211 MUTE
Q901 2SC4116 RESET
D914 DAP202U
D913 DAP202U
D912 DAP202U
D911 DAP202U
D904 MA111
D905 MA111
D906 MA111
D907 RB501V-40
D903 MA111
D901 1SR154
D902 1SR154
CS-MUTE
SW-MUTE
LR-MUTE
⑩ (12/12) (PAGE 45)
⑨ (11/12) (PAGE 44)

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

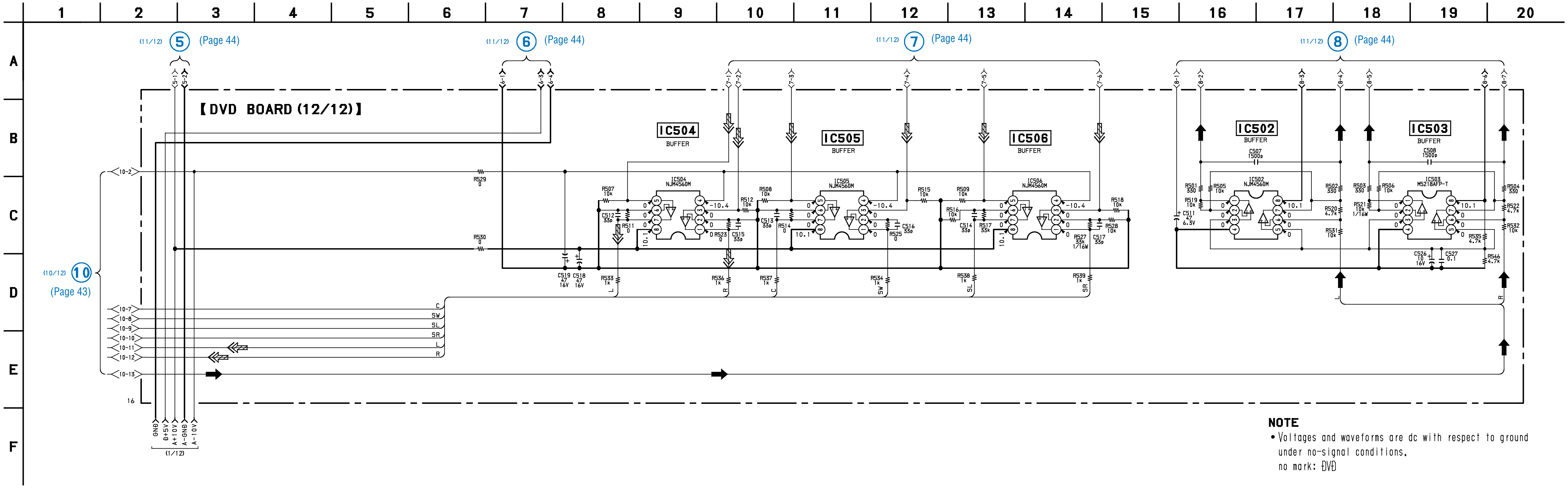
5-14. Schematic Diagram – DVD (11/12) Section –

• See page 68 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I J K L M
【DVD BOARD (11/12)】
IC904
AUDIO DIGITAL PROCESSOR
IC904
CXD9511Q
IC901
IDT71256SA20Y-TC
IC901
STATIC RAM
256MB
IC905
BA033FP-E2
+5V REG
IC906
AUDIO A/D CONV
IC906
AK4527
IC907
AUDIO DIGITAL PROCESSOR
IC907
LC89055W-RA8
IC501
LPF AMP
IC501
L78M05T
FL902
FL903
FL904
FL905
FL90
X503
12.288MHz
ZERO
SMUTE
SAU1
SAU2
SAU3
BCK
LRCK
B.DATA
A.DATA
MCK
SPDIF (4/12)
9 (10/12) (PAGE 43)
9 (10/12) (PAGE 43)
5 (12/12) (PAGE 45)
6 (12/12) (PAGE 45)
7 (12/12) (PAGE 45)
8 (12/12) (PAGE 45)

NOTE
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-15. Schematic Diagram – DVD (12/12) Section –


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
A
B
C
D
E
F
(11/12) 5 (Page 44)
(11/12) 6 (Page 44)
(11/12) 7 (Page 44)
(11/12) 8 (Page 44)
(10/12) 10 (Page 43)
【DVD BOARD (12/12)】
IC504
BUFFER
IC505
BUFFER
IC506
BUFFER
IC502
BUFFER
IC503
BUFFER
IC504 NJM4560M
IC505 NJM4560M
IC506 NJM4560M
IC502 NJM4560M
IC503 M5218AFP-T
C507 1500p
C508 1500p
R529 0
R530 0
R507 10k
R508 10k
R509 10k
R512 10k
R515 10k
R516 10k
R518 10k
C512 33p
C513 33p
C514 33p
C515 33p
C516 33p
C517 33p
R511 0
R514 0
R517 33k
R523 0
R525 0
R527 33k 1/16W
R528 10k
C519 47 16V
C518 47 16V
R533 1k
R536 1k
R537 1k
R534 1k
R538 1k
R539 1k
R501 330
R505 10k
R519 10k
C511 47 6.3V
R502 330
R520 4.7k
R531 10k
R503 330
R506 10k
R521 10k 1/16W
R504 330
R522 4.7k
R532 10k
R535 4.7k
R546 4.7k
C526 10 16V
C527 0.1
-10.4
10.1
0
10-2
10-7
10-8
10-9
10-10
10-11
10-12
10-13
16
C
SW
SL
SR
L
R
5-1
5-2
6-1
6-3
6-4
7-1
7-2
7-3
7-4
7-5
7-6
8-1
8-2
8-3
8-4
8-5
8-6
8-7
GND
D+5V
A+10V
A-GND
A-10V
(1/12)

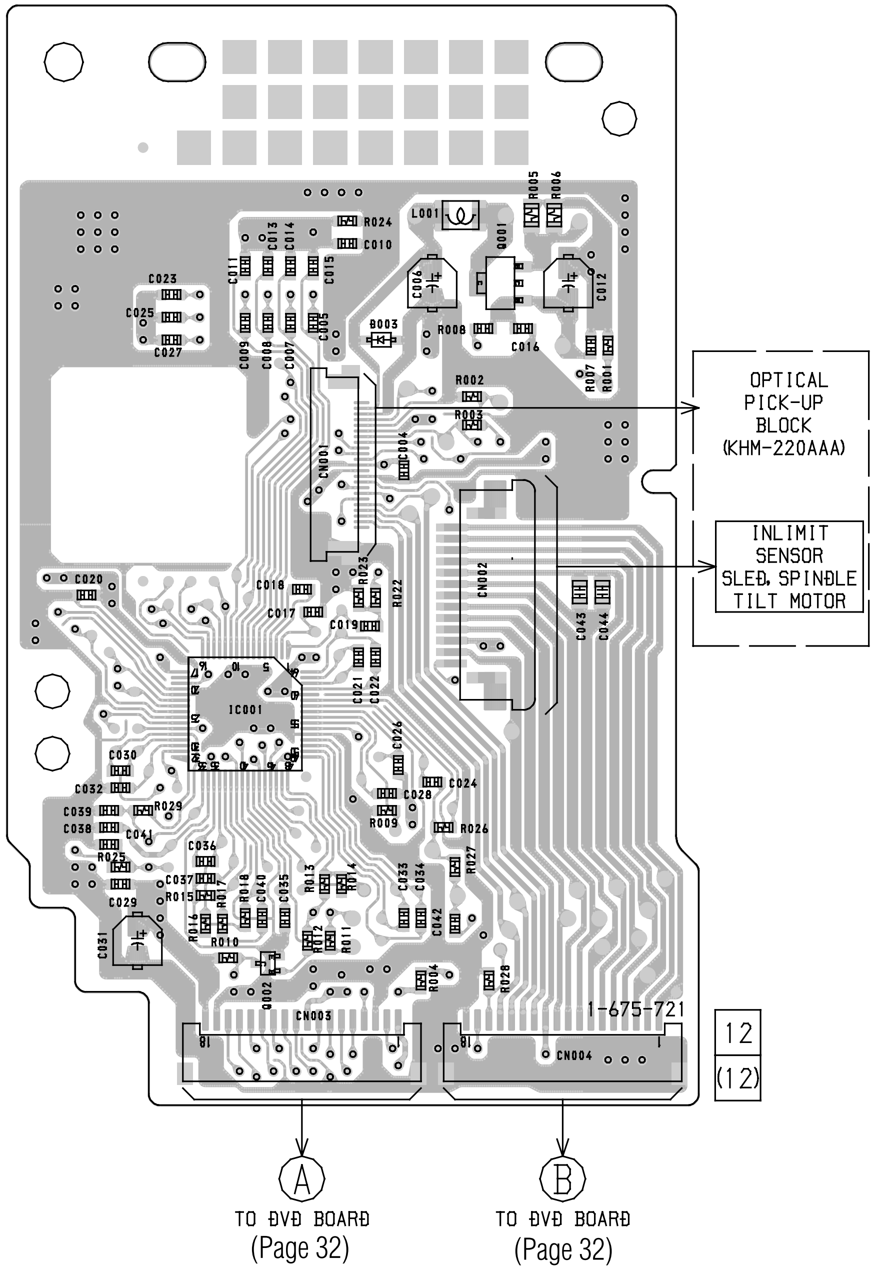
NOTE
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DVD

5-16. Printed Wiring Board – TK Section –

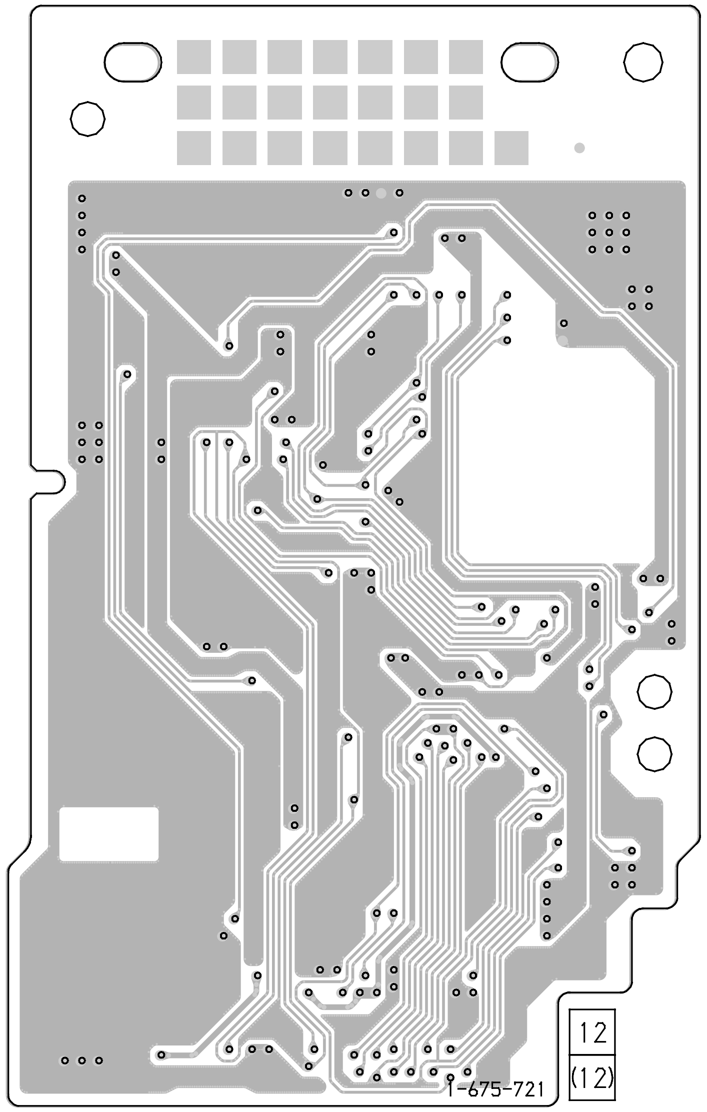
- See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.

【TK BOARD】(SIDE A)

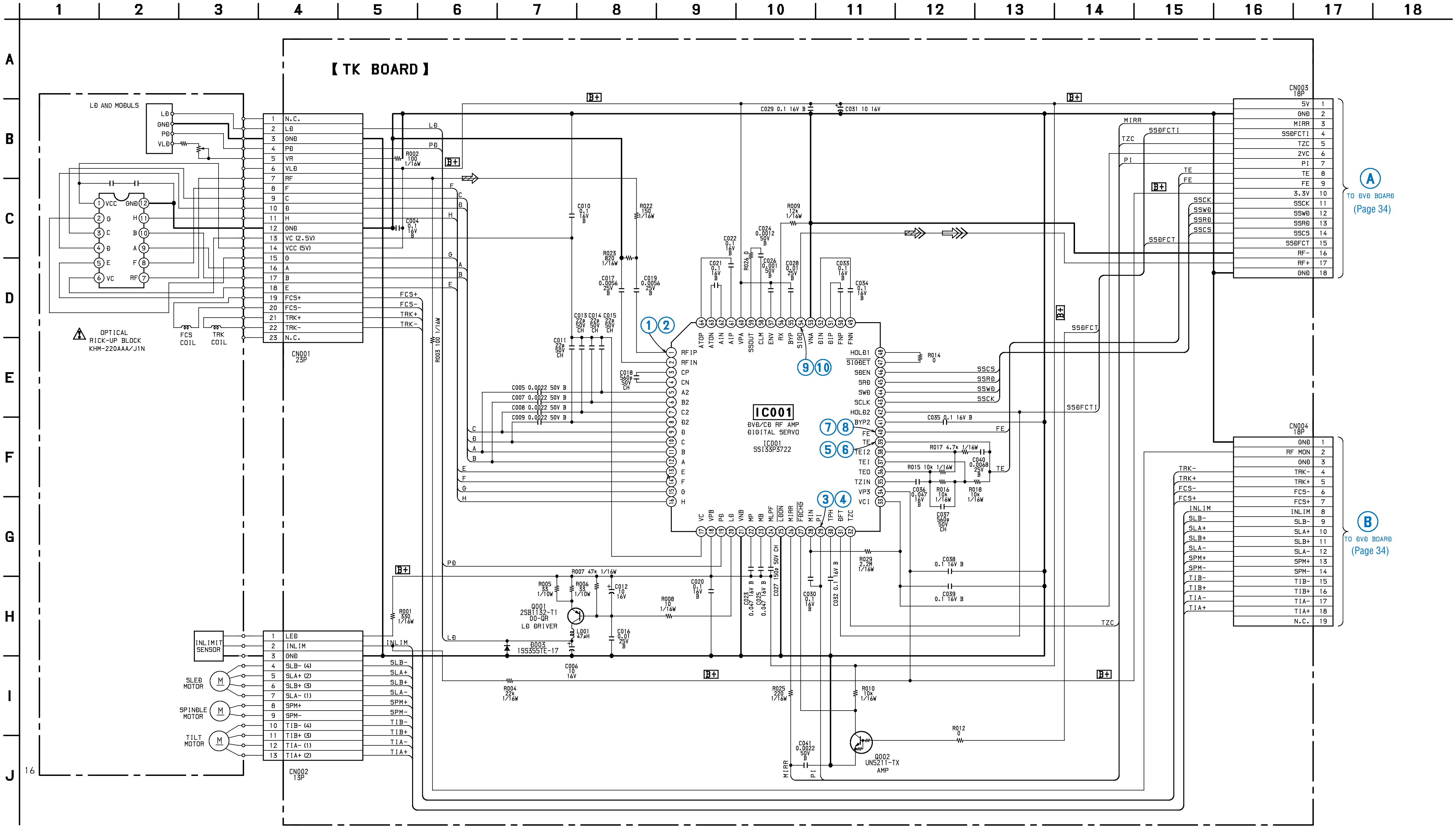

L001
R024
C010
R005
R006
Q001
C011
C013
C014
C015
C006
C012
C023
C025
C027
C009
C008
C007
C005
B003
R008
C016
R007
R001
R002
R003
CN001
C004
CN002
C020
C018
C017
R023
R022
C019
C043
C044
IC001
C021
C022
C026
C030
C032
C039
C038
R029
C041
C024
C028
R009
R026
C036
R025
C037
R015
R017
R018
C040
C035
R013
R014
C033
C034
R027
C029
R016
R010
R012
R011
C042
C031
Q002
CN003
R004
R028
CN004
1-675-721
12
(12)
OPTICAL PICK-UP BLOCK (KHM-220AAA)
INLIMIT SENSOR
SLED, SPINDLE TILT MOTOR
A
TO DVD BOARD
(Page 32)
B
TO DVD BOARD
(Page 32)

【TK BOARD】(SIDE B)


1-675-721
12
(12)

5-17. Schematic Diagram – TK Section –

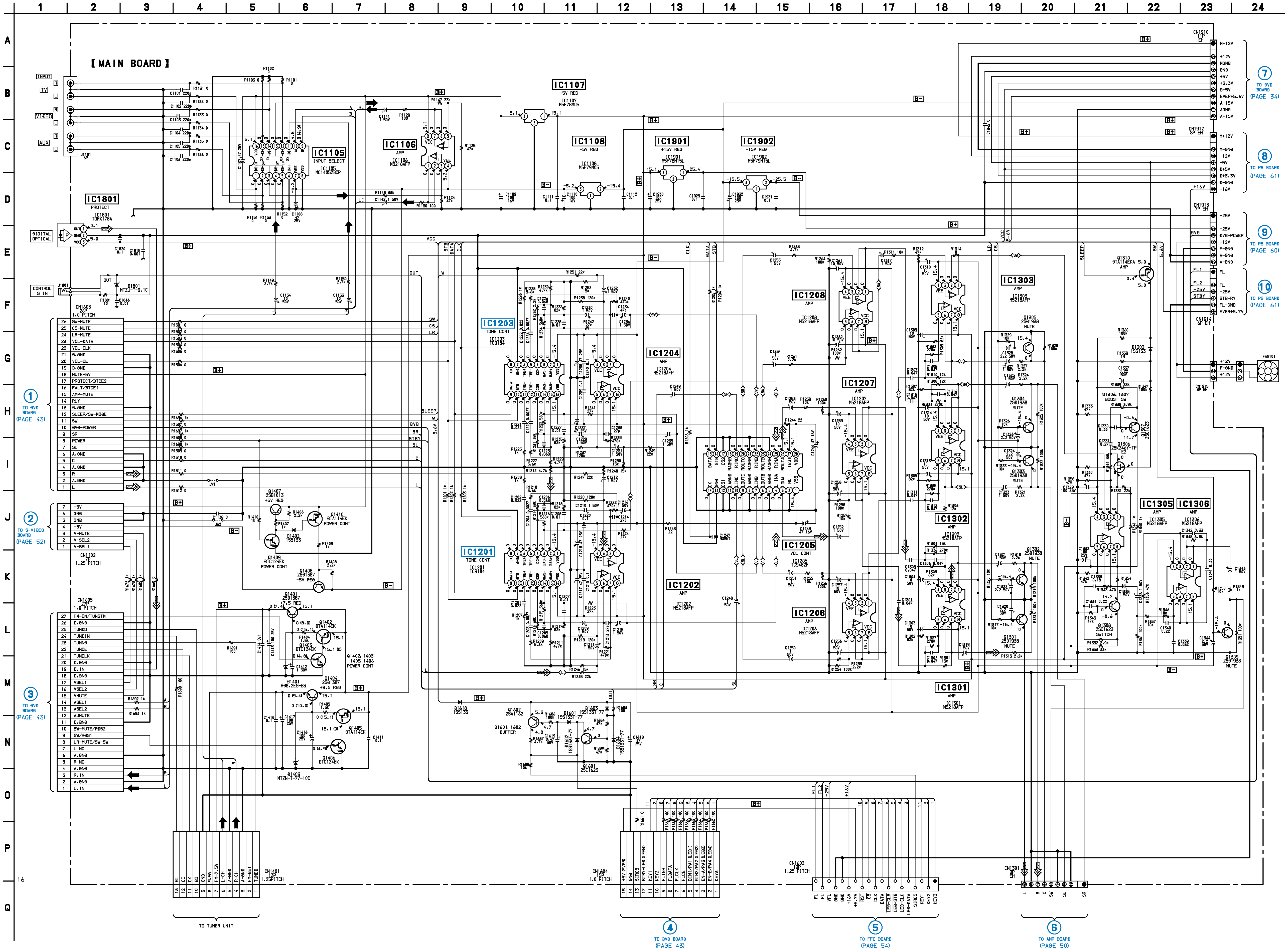
• See page 29 for Waveforms.



【TK BOARD】
LD AND MODULS
OPTICAL PICK-UP BLOCK KHM-220AAA/J1N
FCS COIL
TRK COIL
CN001 23P
CN002 13P
CN003 18P
CN004 19P
IC001
DVD/CD RF AMP DIGITAL SERVO
IC001 SSI33P3722
Q001 2SB1132-T1 00-QR LD DRIVER
D003 1SS355TE-17
Q002 UN5211-TX AMP
INLIMIT SENSOR
SLED MOTOR
SPINDLE MOTOR
TILT MOTOR
A TO DVD BOARD (Page 34)
B TO DVD BOARD (Page 34)
B+

5-18. Schematic Diagram – MAIN Section –

• See page 29 for Waveforms.   • See page 71 for IC Block Diagrams.

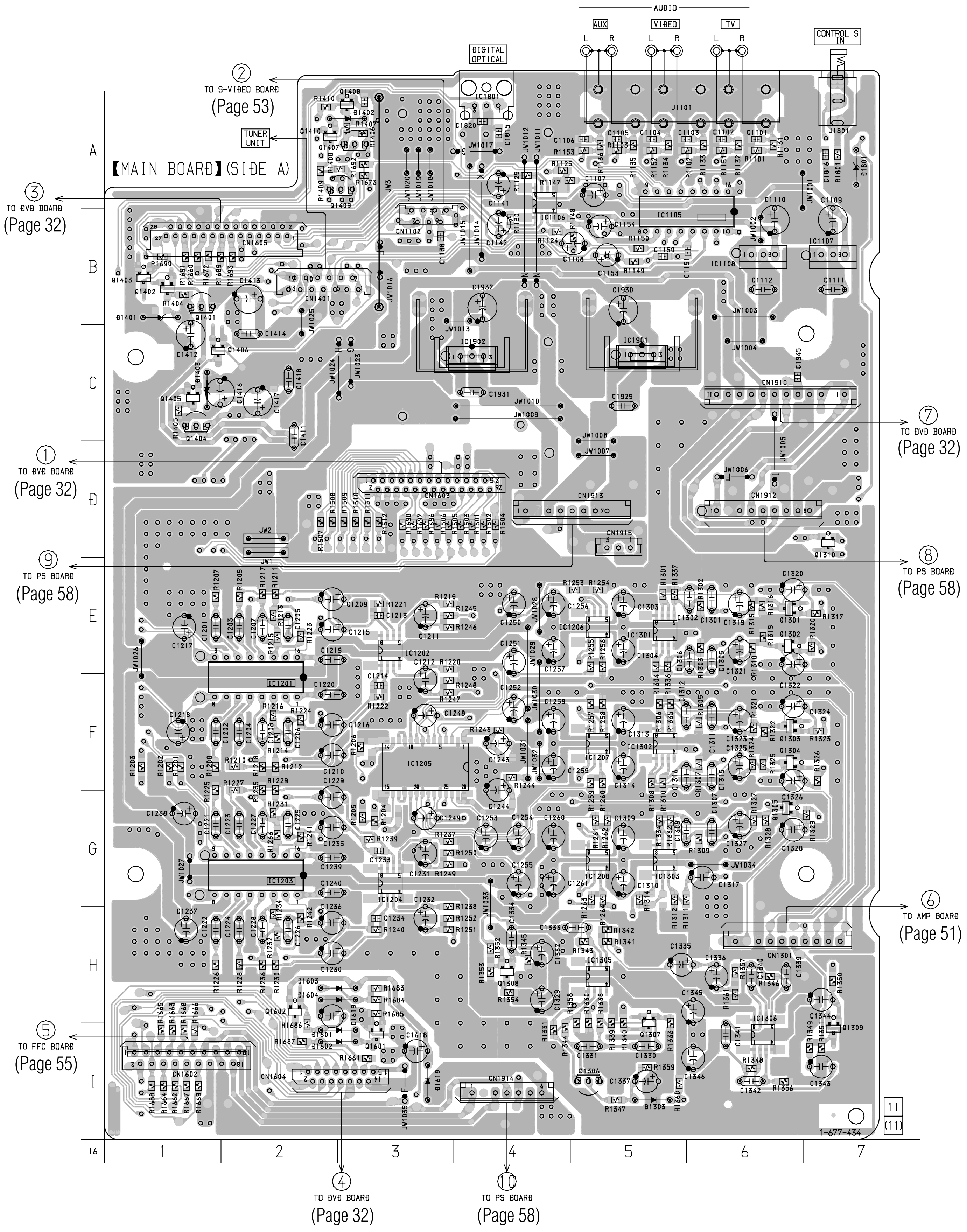


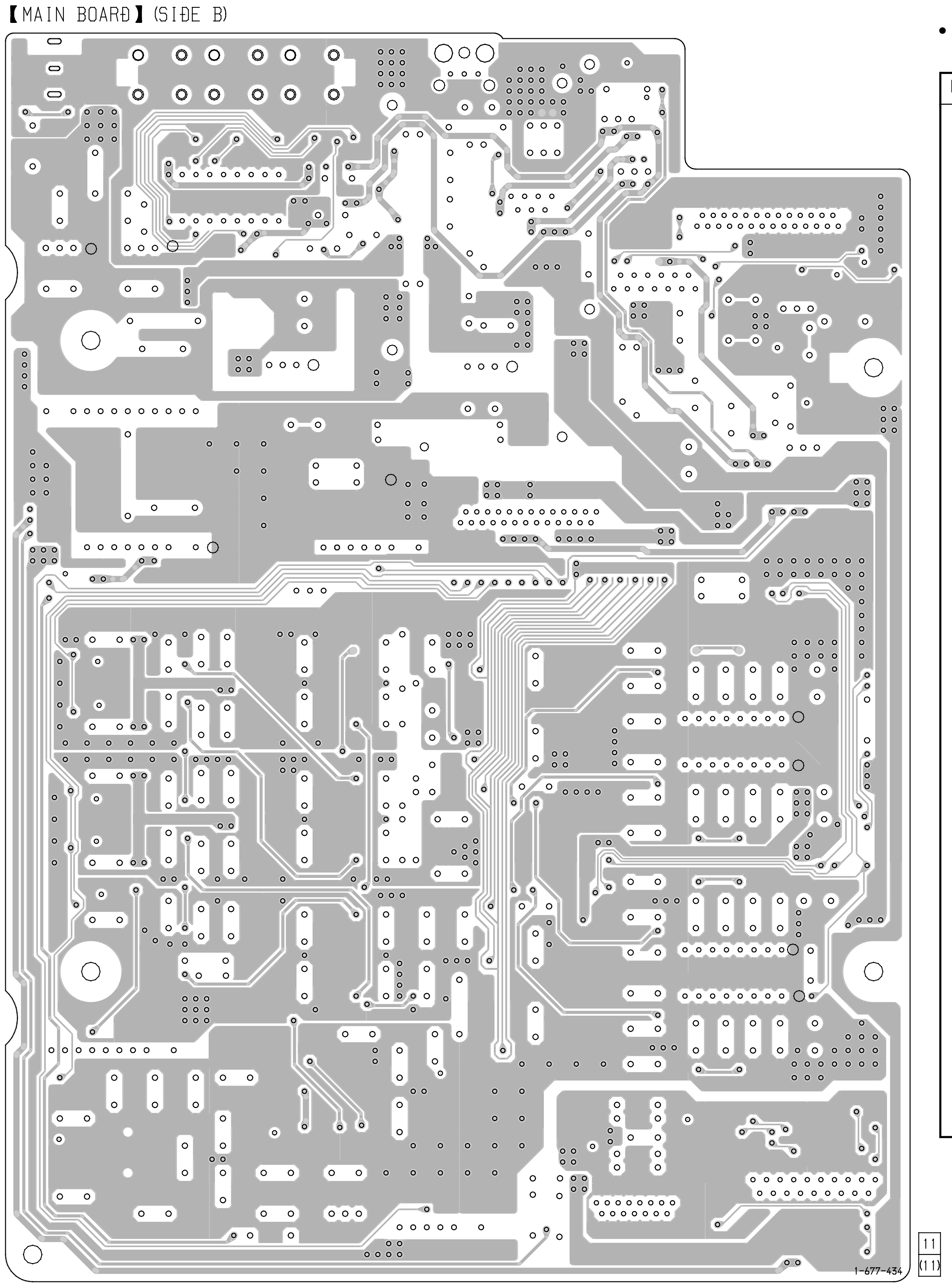
【MAIN BOARD】
INPUT
TV
VIDEO
AUX
DIGITAL OPTICAL
CONTROL S IN
IC1801 PROTECT
IC1105 INPUT SELECT
IC1106 AMP
IC1107 +5V REG
IC1108 -5V REG
IC1901 +15V REG
IC1902 -15V REG
IC1203 TONE CONT
IC1201 TONE CONT
IC1204 AMP
IC1202 AMP
IC1208 AMP
IC1207 AMP
IC1205 VOL CONT
IC1206 AMP
IC1303 AMP
IC1302 AMP
IC1301 AMP
IC1305 AMP
IC1306 AMP
Q1407 +5V REG
Q1410 POWER CONT
Q1403 POWER CONT
Q1408 -5V REG
Q1401 +7.5 REG
Q1402, 1403 1405, 1406 POWER CONT
Q1404 +9.5 REG
Q1601, 1602 BUFFER
Q1310 AMP
Q1305 MUTE
Q1304 MUTE
Q1303 MUTE
Q1306, 1307 BOOST SW
Q1308 SWITCH
Q1302 MUTE
Q1301 MUTE
Q1309 MUTE
CN1910
CN1912
CN1913
CN1914
CN1915
FAN101
① TO DVD BOARD (PAGE 43)
② TO S-VIDEO BOARD (PAGE 52)
③ TO DVD BOARD (PAGE 43)
④ TO DVD BOARD (PAGE 43)
⑤ TO FFC BOARD (PAGE 54)
⑥ TO AMP BOARD (PAGE 50)
⑦ TO DVD BOARD (PAGE 34)
⑧ TO PS BOARD (PAGE 61)
⑨ TO PS BOARD (PAGE 60)
⑩ TO PS BOARD (PAGE 61)
CN1403 1.0 PITCH
CN1102 1.25 PITCH
CN1605 1.0 PITCH
CN1401 1.25PITCH
CN1604 1.0 PITCH
CN1602 1.25 PITCH
CN1301
TO TUNER UNIT

5-19. Printed Wiring Board – MAIN Section –

• See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.


AUDIO
AUX
VIDEO
TV
L R L R L R
DIGITAL OPTICAL
CONTROL S IN
J1101
【MAIN BOARD】(SIDE A)
② TO S-VIDEO BOARD (Page 53)
TUNER UNIT
③ TO DVD BOARD (Page 32)
① TO DVD BOARD (Page 32)
⑨ TO PS BOARD (Page 58)
⑤ TO FFC BOARD (Page 55)
④ TO DVD BOARD (Page 32)
⑩ TO PS BOARD (Page 58)
⑦ TO DVD BOARD (Page 32)
⑧ TO PS BOARD (Page 58)
⑥ TO AMP BOARD (Page 51)
A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
7
1-677-434
11
(11)

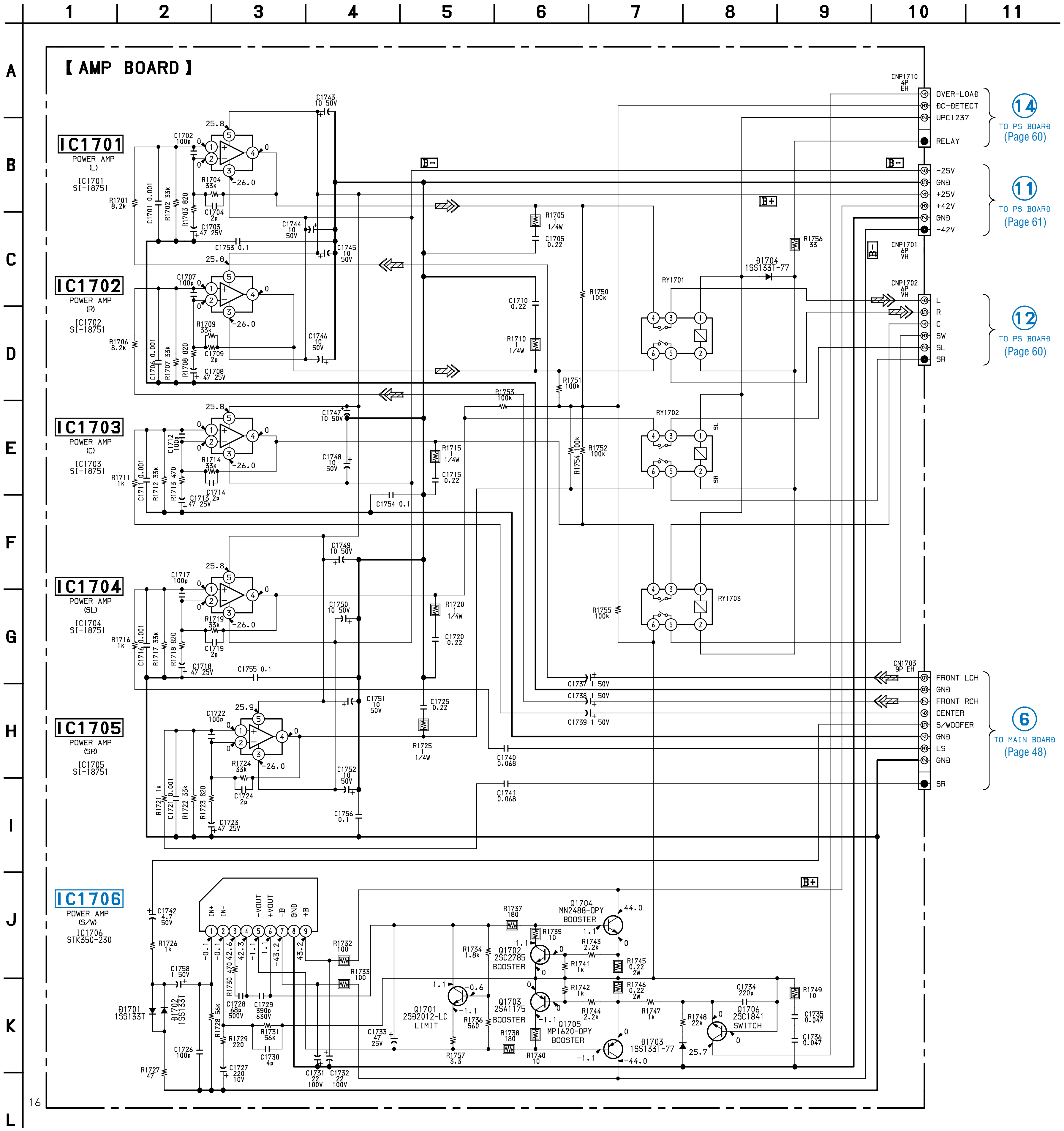

【MAIN BOARD】(SIDE B)
1-677-434
11
(11)

• Semiconductor Location

Ref. No.	Location
D1303	I-5
D1401	B-1
D1403	C-1
D1601	I-2
D1602	I-2
D1603	H-2
D1604	H-2
D1618	I-3
D1801	A-7
IC1105	B-5
IC1106	B-4
IC1107	B-6
IC1108	B-6
IC1201	F-2
IC1202	E-3
IC1203	G-2
IC1204	G-3
IC1205	F-3
IC1206	E-5
IC1207	F-5
IC1208	G-5
IC1301	E-5
IC1302	F-5
IC1303	G-5
IC1305	H-5
IC1306	I-6
IC1801	A-4
IC1901	C-5
IC1902	C-3
Q1301	E-6
Q1302	E-6
Q1303	F-6
Q1304	F-6
Q1305	G-6
Q1306	I-5
Q1307	H-5
Q1308	H-4
Q1309	H-7
Q1310	D-7
Q1401	B-1
Q1402	B-1
Q1403	B-1
Q1404	C-1
Q1405	C-1
Q1406	C-1
Q1601	I-3
Q1602	H-2

5-20. Schematic Diagram – AMP Section –

- See page 70 for IC Block Diagrams.

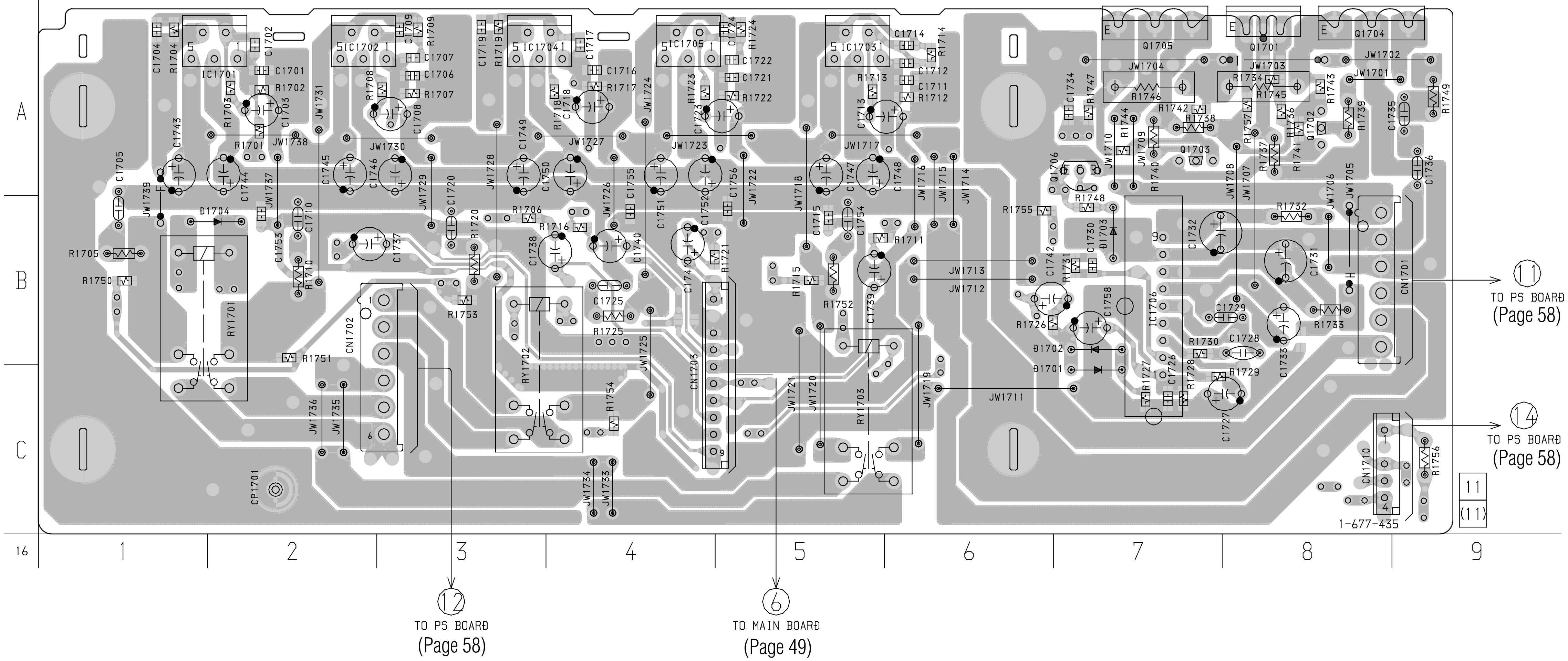

【AMP BOARD】
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L
IC1701
POWER AMP (L)
IC1701 SI-18751
IC1702
POWER AMP (R)
IC1702 SI-18751
IC1703
POWER AMP (C)
IC1703 SI-18751
IC1704
POWER AMP (SL)
IC1704 SI-18751
IC1705
POWER AMP (SR)
IC1705 SI-18751
IC1706
POWER AMP (S/W)
IC1706 STK350-230
CNP1710 4P EH
OVER-LOAD
DC-DETECT
UPC1237
RELAY
14
TO PS BOARD
(Page 60)
-25V
GND
+25V
+42V
GND
-42V
11
TO PS BOARD
(Page 61)
CNP1701 6P VH
CNP1702 6P VH
L
R
C
SW
SL
SR
12
TO PS BOARD
(Page 60)
CN1703 9P EH
FRONT LCH
GND
FRONT RCH
CENTER
S/WOOFER
GND
LS
GND
SR
6
TO MAIN BOARD
(Page 48)
B-
B+
RY1701
RY1702
RY1703
D1704 1SS133T-77
R1756 33
R1705 1 1/4W
C1705 0.22
R1710 1 1/4W
C1710 0.22
R1715 1 1/4W
C1715 0.22
R1720 1 1/4W
C1720 0.22
R1725 1 1/4W
C1725 0.22
R1750 100k
R1751 100k
R1752 100k
R1753 100k
R1754 100k
R1755 100k
C1737 1 50V
C1738 1 50V
C1739 1 50V
C1740 0.068
C1741 0.068
C1743 10 50V
C1744 10 50V
C1745 10 50V
C1746 10 50V
C1747 10 50V
C1748 10 50V
C1749 10 50V
C1750 10 50V
C1751 10 50V
C1752 10 50V
C1753 0.1
C1754 0.1
C1755 0.1
C1756 0.1
C1702 100p
C1707 100p
C1712 100p
C1717 100p
C1722 100p
R1701 8.2k
R1706 8.2k
R1711 1k
R1716 1k
R1721 1k
C1701 0.001
C1706 0.001
C1711 0.001
C1716 0.001
C1721 0.001
R1702 33k
R1707 33k
R1712 33k
R1717 33k
R1722 33k
R1703 820
R1708 820
R1713 470
R1718 820
R1723 820
R1704 33k
R1709 33k
R1714 33k
R1719 33k
R1724 33k
C1704 2p
C1709 2p
C1714 2p
C1719 2p
C1724 2p
C1703 47 25V
C1708 47 25V
C1713 47 25V
C1718 47 25V
C1723 47 25V
25.8
25.9
-26.0
0
C1742 4.7 50V
R1726 1k
C1758 1 50V
D1701 1SS133T
D1702 1SS133T
R1727 47
C1726 100p
R1728 56k
R1730 470
C1728 68p 500V
C1729 390p 630V
R1729 220
R1731 56k
C1730 4p
C1727 220 10V
C1731 22 100V
C1732 22 100V
R1732 100
R1733 100
C1733 47 25V
IN+
IN-
-VOUT
+VOUT
-B
GND
+B
-0.1
-0.6
42.6
42.3
-1.1
-43.2
43.2
Q1701 2SD2012-LC LIMIT
R1757 3.3
R1734 1.8k
R1736 560
Q1702 2SC2785 BOOSTER
Q1703 2SA1175 BOOSTER
R1737 180
R1738 180
R1739 10
R1740 10
R1741 1k
R1742 1k
R1743 2.2k
R1744 2.2k
Q1704 MN2488-OPY BOOSTER
Q1705 MP1620-OPY BOOSTER
R1745 0.22 2W
R1746 0.22 2W
44.0
-44.0
1.1
-1.1
R1747 1k
R1748 22k
D1703 1SS133T-77
25.7
Q1706 2SC1841 SWITCH
C1734 220p
R1749 10
C1735 0.047
C1736 0.047
16

5-21. Printed Wiring Board – AMP Section –

- See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.

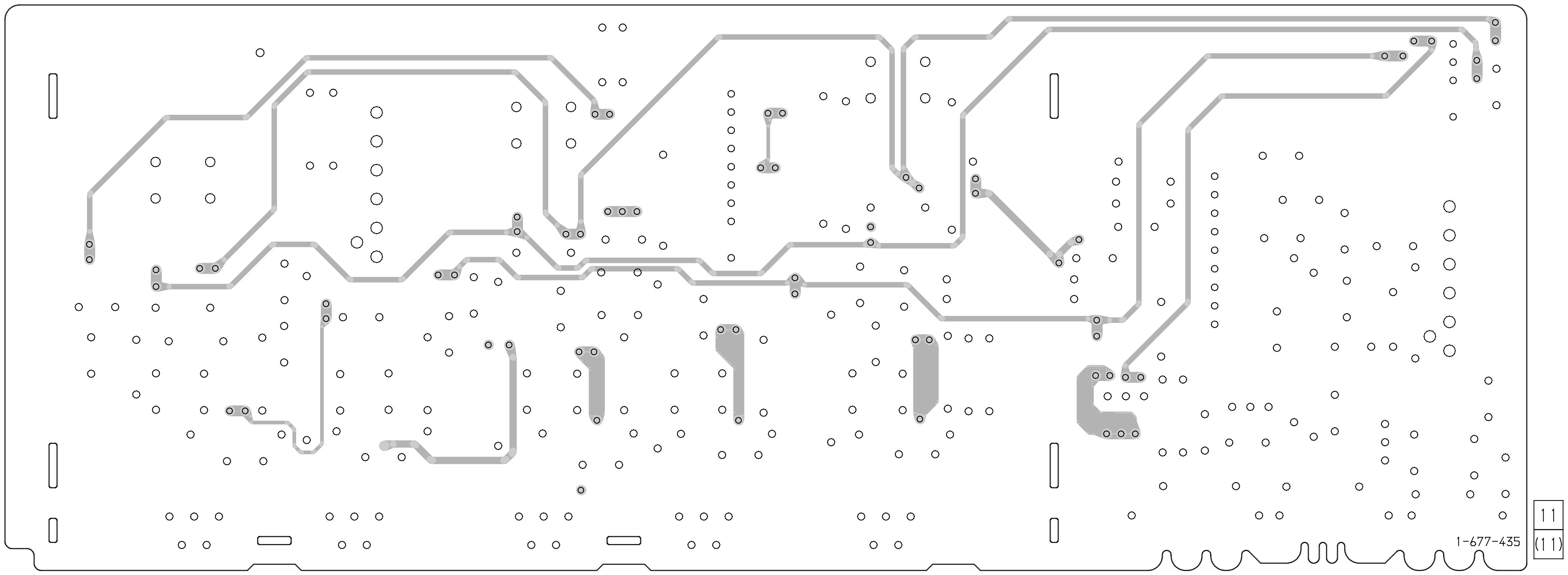
【AMP BOARD】(SIDE A)


A
B
C
1
2
3
4
5
6
7
8
9
16
IC1701
IC1702
IC1703
IC1704
IC1705
IC1706
Q1701
Q1702
Q1703
Q1704
Q1705
Q1706
D1701
D1702
D1703
D1704
RY1701
RY1702
RY1703
CN1701
CN1702
CN1703
CN1710
CP1701
11
TO PS BOARD
(Page 58)
14
TO PS BOARD
(Page 58)
12
TO PS BOARD
(Page 58)
6
TO MAIN BOARD
(Page 49)
1-677-435
11
(11)

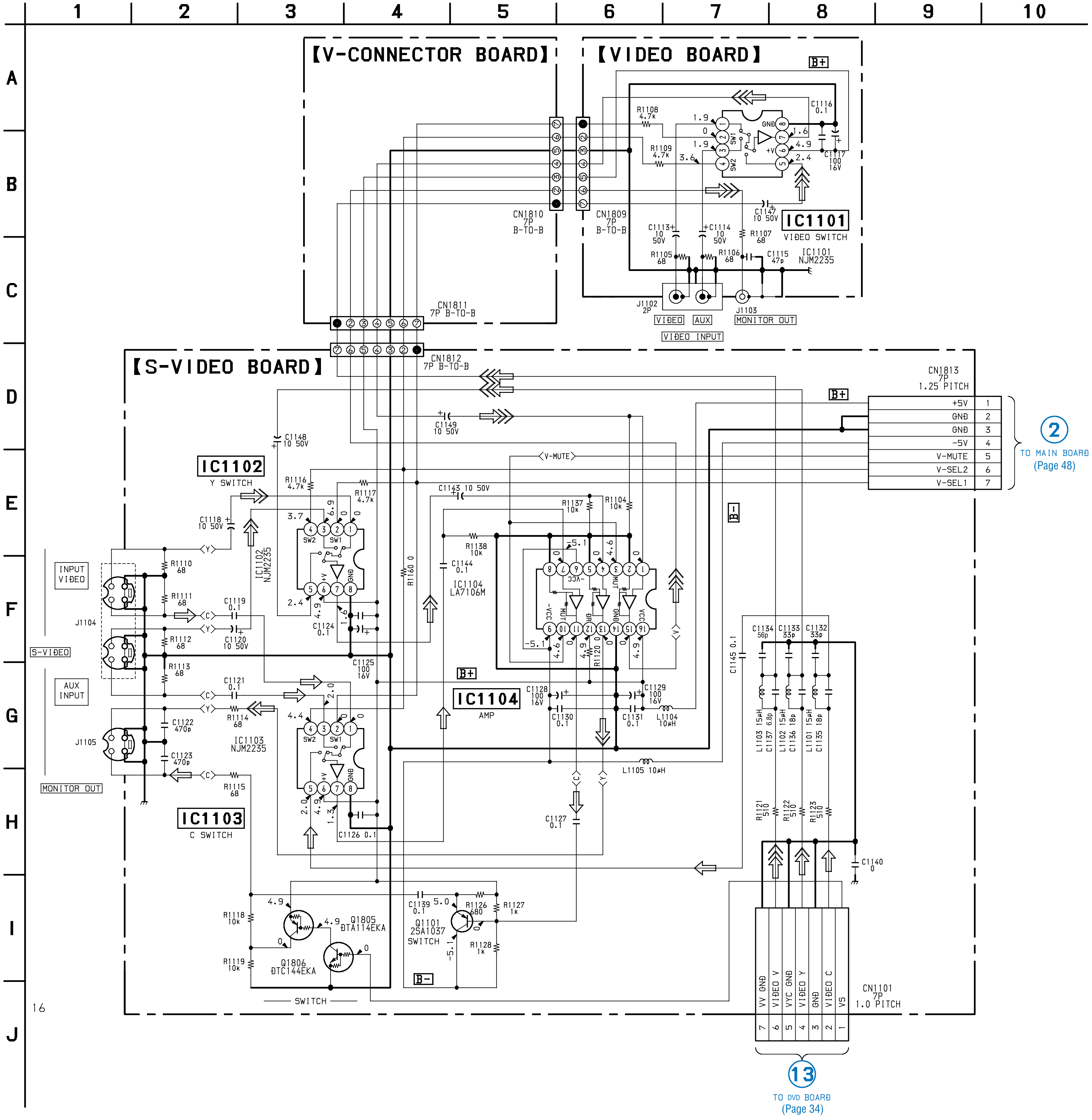
• Semiconductor Location

Ref. No.	Location
D1701	B-7
D1702	B-7
D1703	B-7
D1704	B-1
IC1701	A-1
IC1702	A-2
IC1703	A-5
IC1704	A-3
IC1705	A-4
IC1706	B-7
Q1701	A-8
Q1702	A-8
Q1703	A-7
Q1704	A-8
Q1705	A-7
Q1706	A-7

【AMP BOARD】(SIDE B)


1-677-435
11
(11)

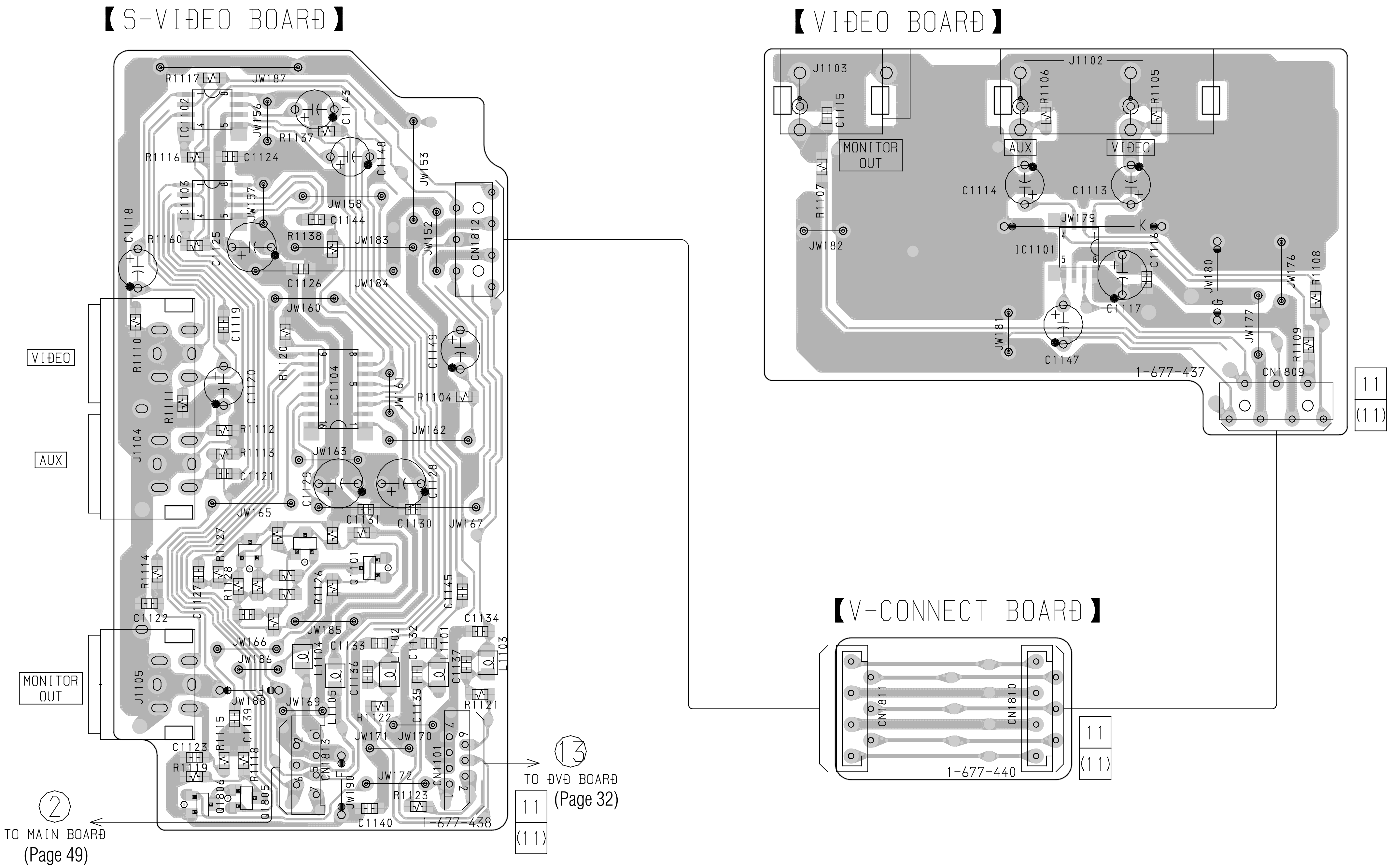
5-22. Schematic Diagram – VIDEO Section –


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
【V-CONNECTOR BOARD】
【VIDEO BOARD】
【S-VIDEO BOARD】
B+
B−
CN1810 7P B-TO-B
CN1809 7P B-TO-B
CN1811 7P B-TO-B
CN1812 7P B-TO-B
CN1813 7P 1.25 PITCH
CN1101 7P 1.0 PITCH
IC1101 VIDEO SWITCH
IC1101 NJM2235
IC1102 Y SWITCH
IC1102 NJM2235
IC1103 C SWITCH
IC1103 NJM2235
IC1104 AMP
IC1104 LA7106M
Q1805 DTA114EKA
Q1806 DTC144EKA
Q1101 2SA1037 SWITCH
SWITCH
J1102 2P
J1103
J1104
J1105
VIDEO
AUX
VIDEO INPUT
MONITOR OUT
INPUT VIDEO
S-VIDEO
AUX INPUT
MONITOR OUT
V-MUTE
+5V
GND
GND
−5V
V-MUTE
V-SEL2
V-SEL1
VV GND
VIDEO V
VYC GND
VIDEO Y
GND
VIDEO C
VS
TO MAIN BOARD (Page 48)
TO DVD BOARD (Page 34)
R1108 4.7k
R1109 4.7k
R1105 68
R1106 68
R1107 68
C1113 10 50V
C1114 10 50V
C1115 47p
C1116 0.1
C1117 100 16V
C1147 10 50V
C1148 10 50V
C1149 10 50V
C1143 10 50V
C1144 0.1
C1118 10 50V
R1116 4.7k
R1117 4.7k
R1110 68
R1111 68
R1112 68
R1113 68
R1114 68
R1115 68
R1118 10k
R1119 10k
R1160 0
R1138 10k
R1137 10k
R1104 10k
R1120 0
C1119 0.1
C1120 10 50V
C1121 0.1
C1122 470p
C1123 470p
C1124 0.1
C1125 100 16V
C1126 0.1
C1127 0.1
C1128 100 16V
C1129 100 16V
C1130 0.1
C1131 0.1
C1139 0.1
C1140 0
C1145 0.1
C1134 56p
C1133 33p
C1132 33p
C1137 6.8p
C1136 18p
C1135 18p
L1103 15μH
L1102 15μH
L1101 15μH
L1104 10μH
L1105 10μH
R1121 510
R1122 510
R1123 510
R1126 680
R1127 1k
R1128 1k
SW1
SW2
GND
16

5-23. Printed Wiring Board – VIDEO Section –

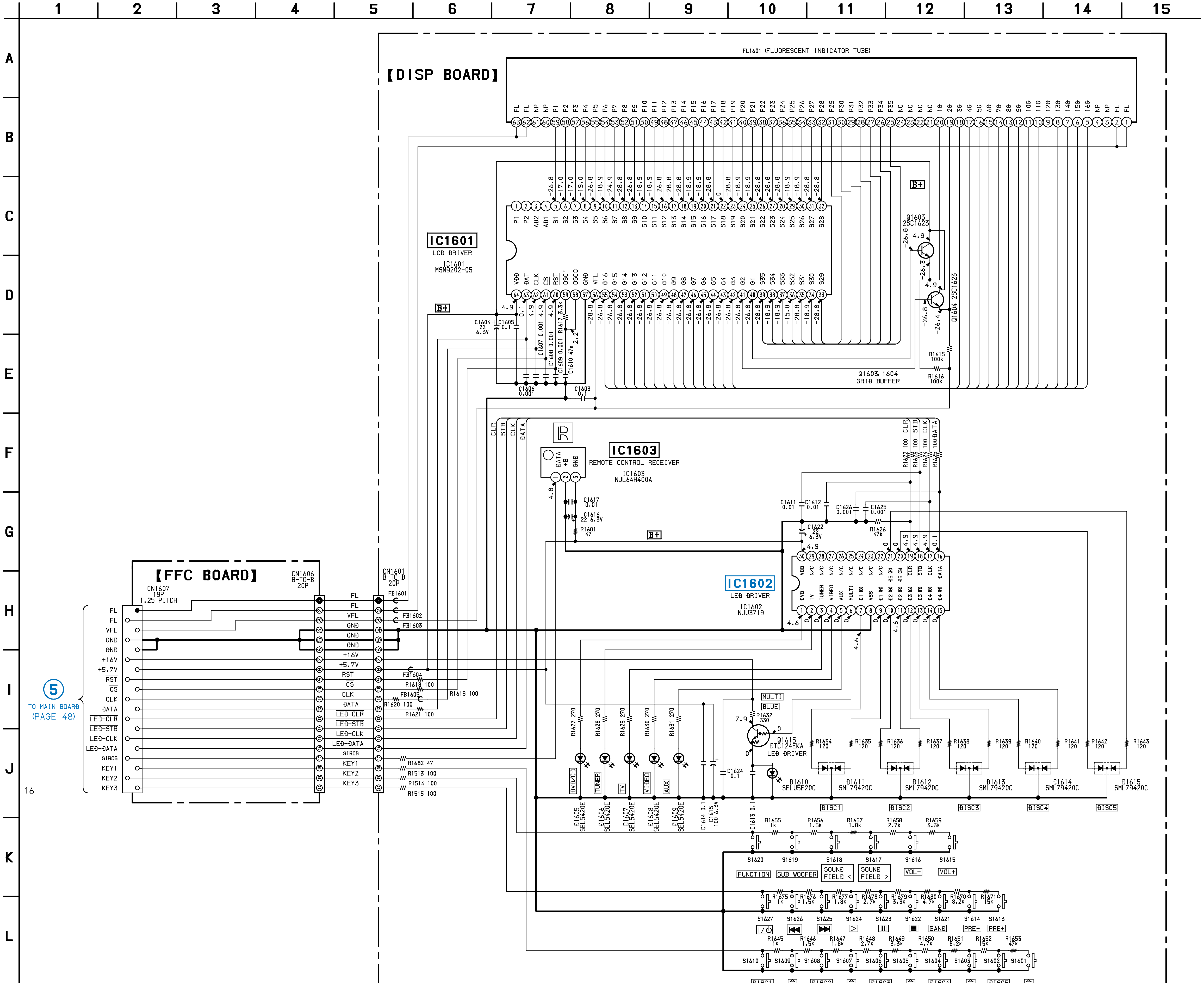
• See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.


【S-VIDEO BOARD】
R1117
JW187
IC1102
JW156
C1143
R1137
C1148
R1116
C1124
JW153
IC1103
JW157
JW158
C1144
C1118
R1160
C1125
R1138
JW183
JW152
CN1812
C1126
JW184
JW160
VIDEO
R1110
C1119
C1120
R1120
IC1104
C1149
R1111
JW161
R1104
R1112
R1113
JW162
AUX
J1104
JW163
C1121
C1129
C1128
JW165
C1131
C1130
JW167
R1127
R1114
R1128
R1126
Q1101
C1127
C1145
C1122
JW185
C1134
JW166
C1133
L1102
C1132
L1101
JW186
L1104
C1136
C1137
L1103
MONITOR OUT
J1105
JW188
JW169
L1105
C1135
R1121
R1122
C1123
R1115
C1139
CN1813
JW171
JW170
CN1101
R1119
R1118
Q1806
Q1805
JW190
JW172
R1123
C1140
1-677-438
②
TO MAIN BOARD
(Page 49)
⑬
TO DVD BOARD
(Page 32)
11
(11)
【VIDEO BOARD】
J1103
C1115
J1102
R1106
R1105
MONITOR OUT
AUX
VIDEO
R1107
C1114
C1113
JW179
K
JW182
IC1101
C1116
JW180
JW176
R1108
G
C1117
JW181
JW177
R1109
C1147
1-677-437
CN1809
11
(11)
【V-CONNECT BOARD】
CN1811
CN1810
1-677-440
11
(11)

5-24. Schematic Diagram – DISPLAY Section –

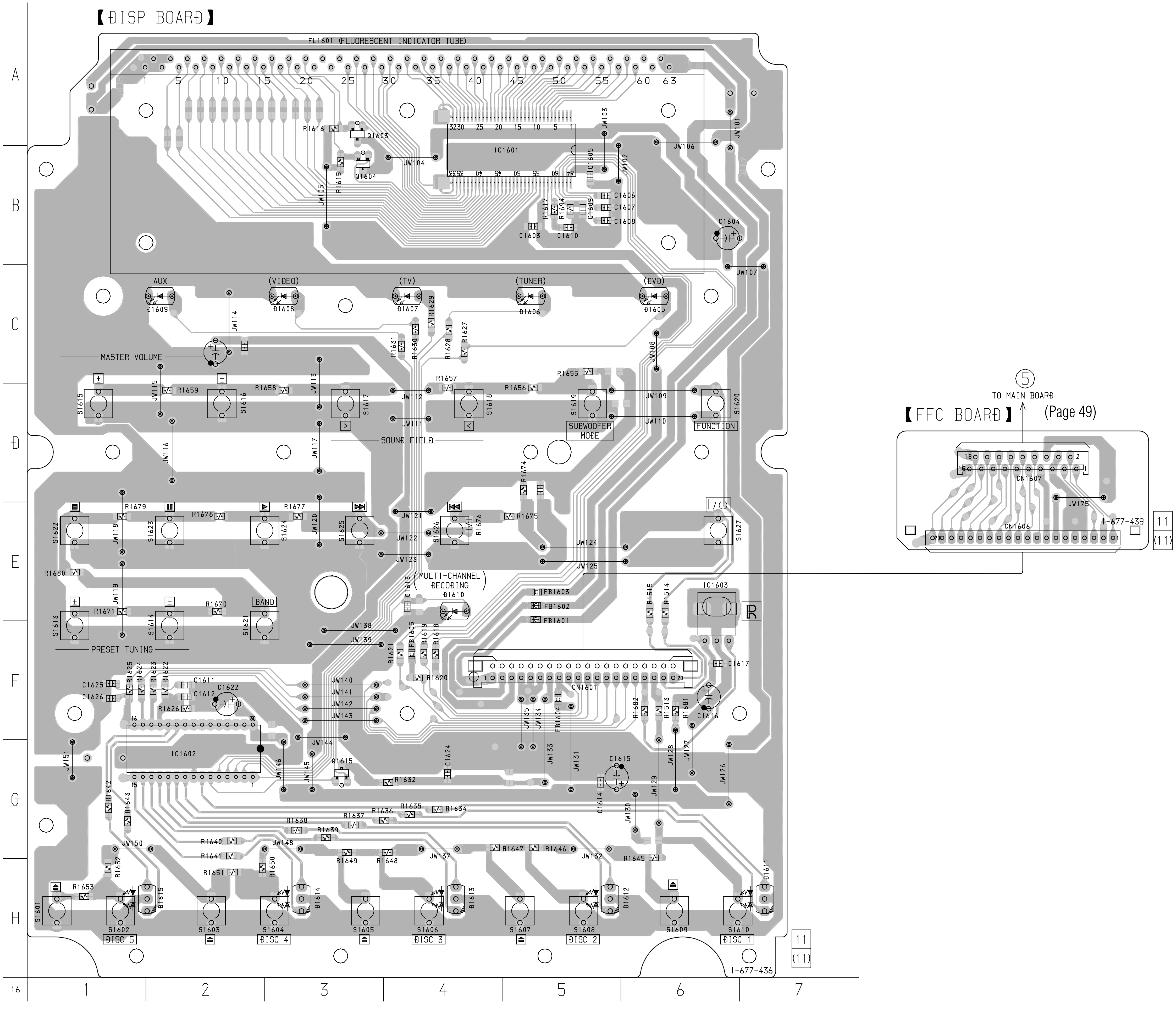
- See page 70 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J K L
【DISP BOARD】
FL1601 (FLUORESCENT INDICATOR TUBE)
IC1601
LCD DRIVER
IC1601
MSM9202-05
Q1603
2SC1623
Q1604 2SC1623
Q1603, 1604
GRID BUFFER
B+
IC1603
REMOTE CONTROL RECEIVER
IC1603
NJL64H400A
IC1602
LED DRIVER
IC1602
NJU3719
Q1615
DTC124EKA
LED DRIVER
【FFC BOARD】
CN1607
19P
1.25 PITCH
CN1606
B-TO-B
20P
CN1601
B-TO-B
20P
FL
FL
VFL
GND
GND
GND
+16V
+5.7V
RST
CS
CLK
DATA
LED-CLR
LED-STB
LED-CLK
LED-DATA
SIRCS
KEY1
KEY2
KEY3
5
TO MAIN BOARD
(PAGE 48)
16
DVD/CD
TUNER
TV
VIDEO
AUX
MULTI
BLUE
D1610 SEL5E20C
D1611 SML79420C
D1612 SML79420C
D1613 SML79420C
D1614 SML79420C
D1615 SML79420C
DISC1
DISC2
DISC3
DISC4
DISC5
S1620 FUNCTION
S1619 SUB WOOFER
S1618 SOUND FIELD <
S1617 SOUND FIELD >
S1616 VOL–
S1615 VOL+
S1627 I/⏻
S1626 ⏮
S1625 ⏭
S1624 ▷
S1623 ⏸
S1622 ■
S1621 BAND
S1614 PRE–
S1613 PRE+
S1610 S1609 S1608 S1607 S1606 S1605 S1604 S1603 S1602 S1601

5-25. Printed Wiring Board – DISPLAY Section –

• See page 28 for Circuit Boards Location.

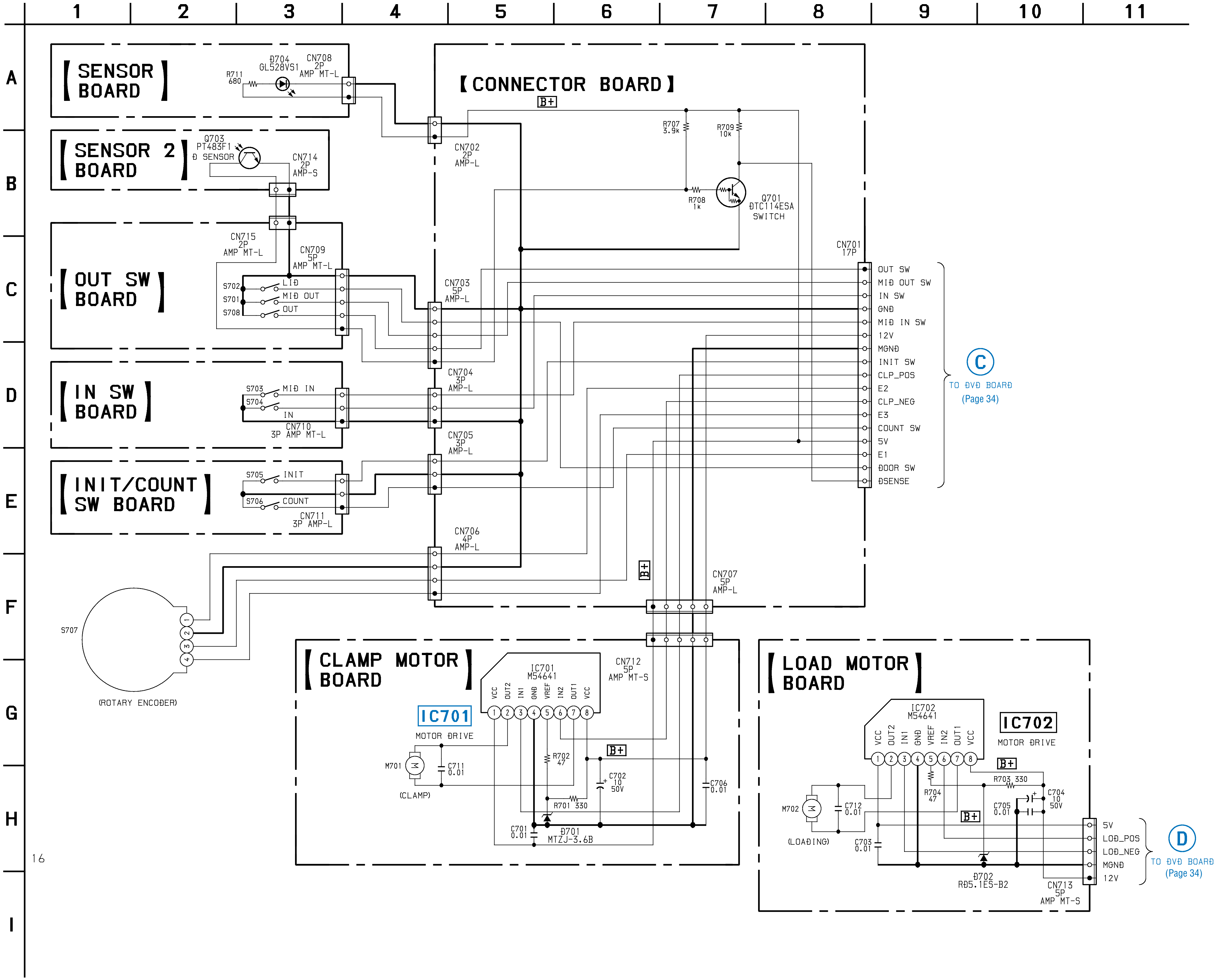
There are few cases that the part printed on this diagram isn't mounted in this model.


【DISP BOARD】
FL1601 (FLUORESCENT INDICATOR TUBE)
1 5 10 15 20 25 30 35 40 45 50 55 60 63
IC1601
Q1603
Q1604
R1616
R1615
JW104
JW105
JW103
JW102
JW101
JW106
C1605
C1606
C1607
C1608
C1609
C1603
C1610
R1617
R1694
C1604
JW107
AUX
(VIDEO)
(TV)
(TUNER)
(DVD)
D1609
D1608
D1607
D1606
D1605
R1629
R1631
R1630
R1628
R1627
JW114
JW108
MASTER VOLUME
+
−
S1615
JW115
R1659
S1616
R1658
JW113
S1617
JW112
JW111
R1657
S1618
R1656
R1655
S1619
JW109
JW110
S1620
>
<
SOUND FIELD
SUBWOOFER MODE
FUNCTION
JW116
JW117
R1674
R1679
R1678
R1677
S1622
JW118
S1623
S1624
JW120
S1625
JW121
JW122
JW123
S1626
R1676
R1675
JW124
JW125
I/⏻
S1627
R1680
JW119
+
−
R1671
R1670
BAND
S1613
S1614
S1621
PRESET TUNING
MULTI-CHANNEL DECODING
D1610
C1613
FB1603
FB1602
FB1601
FB1605
R1619
R1618
R1621
R1620
JW138
JW139
R1515
R1514
IC1603
C1617
CN1601
1
20
C1625
C1626
R1625
R1624
R1623
R1622
C1611
C1612
C1622
R1626
JW140
JW141
JW142
JW143
JW144
16
30
IC1602
15
1
JW151
JW146
JW145
Q1615
R1632
C1624
JW135
JW134
FB1604
JW133
JW131
C1615
R1682
R1513
R1681
C1616
JW128
JW127
JW126
JW129
JW130
C1614
R1642
R1643
R1638
R1637
R1636
R1635
R1634
R1639
R1640
R1641
R1651
R1649
R1648
R1647
R1646
R1645
JW150
JW148
JW137
JW132
R1652
R1650
R1653
S1601
S1602
D1615
S1603
S1604
D1614
S1605
S1606
D1613
S1607
S1608
D1612
S1609
S1610
D1611
DISC 5
DISC 4
DISC 3
DISC 2
DISC 1
1-677-436
11
(11)
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
16
⑤
TO MAIN BOARD
【FFC BOARD】
(Page 49)
CN1607
18
2
19
1
JW175
CN1606
20
1-677-439
11
(11)

• **Semiconductor Location**

Ref. No.	Location
D1605	C-6
D1606	C-5
D1607	C-4
D1608	C-3
D1609	C-2
D1610	E-4
D1611	H-7
D1612	H-5
D1613	H-4
D1614	H-3
D1615	H-2
IC1601	B-4
IC1602	G-2
IC1603	E-6
Q1603	A-3
Q1604	B-3
Q1615	G-3

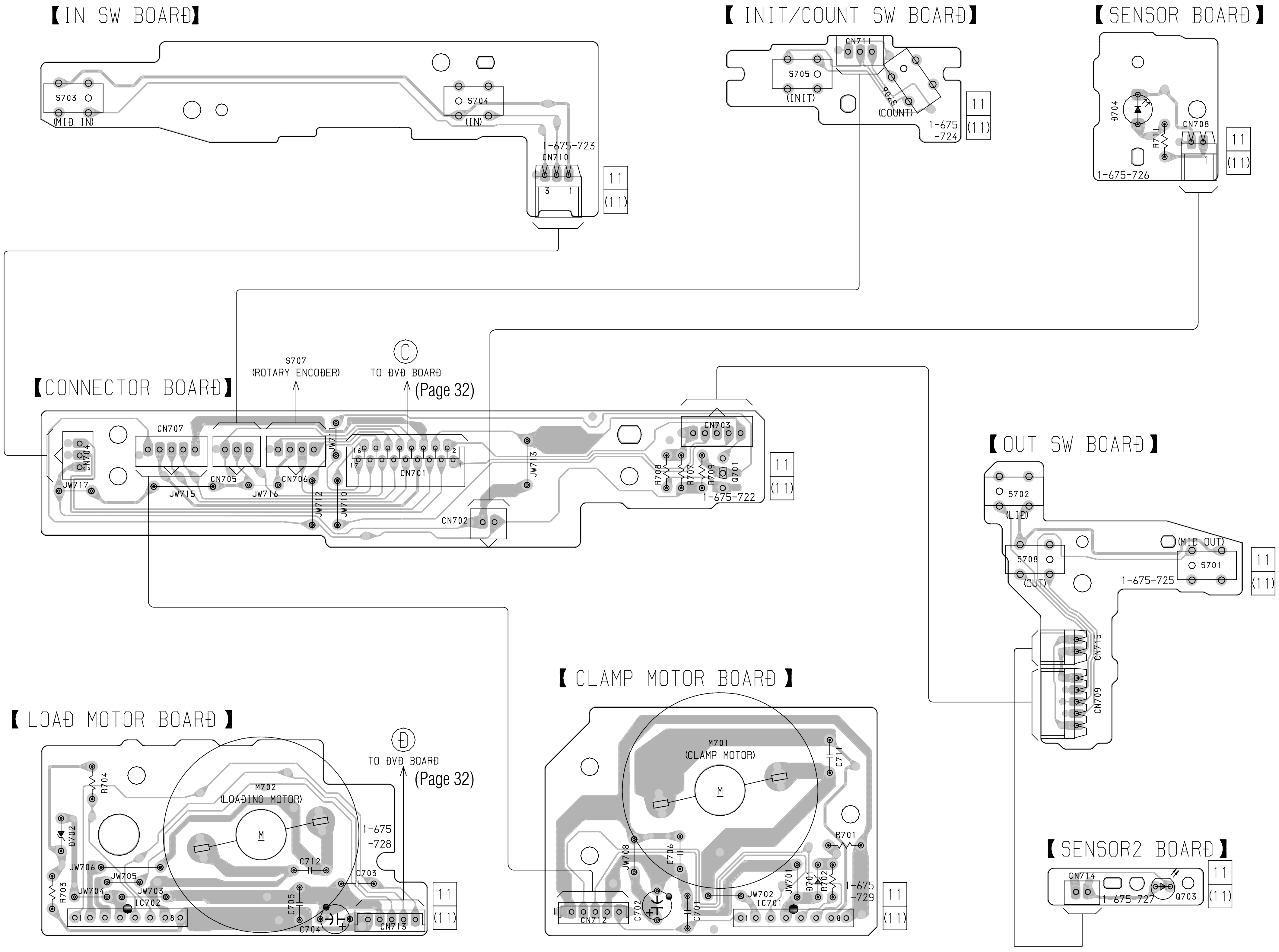
5-26. Schematic Diagram – MOTOR Section –


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
SENSOR BOARD
D704 GL528VS1
CN708 2P AMP MT-L
R711 680
SENSOR 2 BOARD
Q703 PT483F1 D SENSOR
CN714 2P AMP-S
OUT SW BOARD
CN715 2P AMP MT-L
CN709 5P AMP MT-L
S702
S701
S708
LID
MID OUT
OUT
IN SW BOARD
S703
S704
MID IN
IN
CN710 3P AMP MT-L
INIT/COUNT SW BOARD
S705
S706
INIT
COUNT
CN711 3P AMP-L
S707
(ROTARY ENCODER)
CONNECTOR BOARD
B+
CN702 2P AMP-L
R707 3.9k
R709 10k
R708 1k
Q701 DTC114ESA SWITCH
CN703 5P AMP-L
CN704 3P AMP-L
CN705 3P AMP-L
CN706 4P AMP-L
CN707 5P AMP-L
CN701 17P
OUT SW
MID OUT SW
IN SW
GND
MID IN SW
12V
MGND
INIT SW
CLP_POS
E2
CLP_NEG
E3
COUNT SW
5V
E1
DOOR SW
DSENSE
C
TO DVD BOARD
(Page 34)
CLAMP MOTOR BOARD
IC701 M54641
VCC
OUT2
IN1
GND
VREF
IN2
OUT1
VCC
IC701
MOTOR DRIVE
CN712 5P AMP MT-S
M701
C711 0.01
(CLAMP)
R702 47
C702 10 50V
C706 0.01
R701 330
C701 0.01
D701 MTZJ-3.6B
LOAD MOTOR BOARD
IC702 M54641
IC702
MOTOR DRIVE
M702
C712 0.01
(LOADING)
C703 0.01
R704 47
R703 330
C704 10 50V
C705 0.01
D702 RD5.1ES-B2
CN713 5P AMP MT-S
5V
LOD_POS
LOD_NEG
MGND
12V
D
TO DVD BOARD
(Page 34)
16

5-27. Printed Wiring Board – MOTOR Section –

• See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.


【IN SW BOARD】
S703
(MID IN)
S704
(IN)
1-675-723
CN710
11
(11)
【INIT/COUNT SW BOARD】
CN711
S705
(INIT)
S706
(COUNT)
1-675
-724
【SENSOR BOARD】
D704
R711
CN708
1-675-726
【CONNECTOR BOARD】
S707
(ROTARY ENCODER)
C
TO DVD BOARD
(Page 32)
CN704
CN707
CN705
CN706
JW711
CN701
CN703
JW717
JW715
JW716
JW712
JW710
JW713
CN702
R708
R707
R709
Q701
1-675-722
【OUT SW BOARD】
S702
(LID)
S708
(OUT)
(MID OUT)
S701
1-675-725
CN715
CN709
【CLAMP MOTOR BOARD】
M701
(CLAMP MOTOR)
M
C711
R701
JW708
C706
C702
C701
CN712
JW702
IC701
JW701
D701
R702
1-675
-729
【LOAD MOTOR BOARD】
D
TO DVD BOARD
(Page 32)
R704
M702
(LOADING MOTOR)
M
1-675
-728
D702
JW706
JW705
JW704
JW703
R703
IC702
C712
C703
C705
C704
CN713
【SENSOR2 BOARD】
CN714
1-675-727
Q703

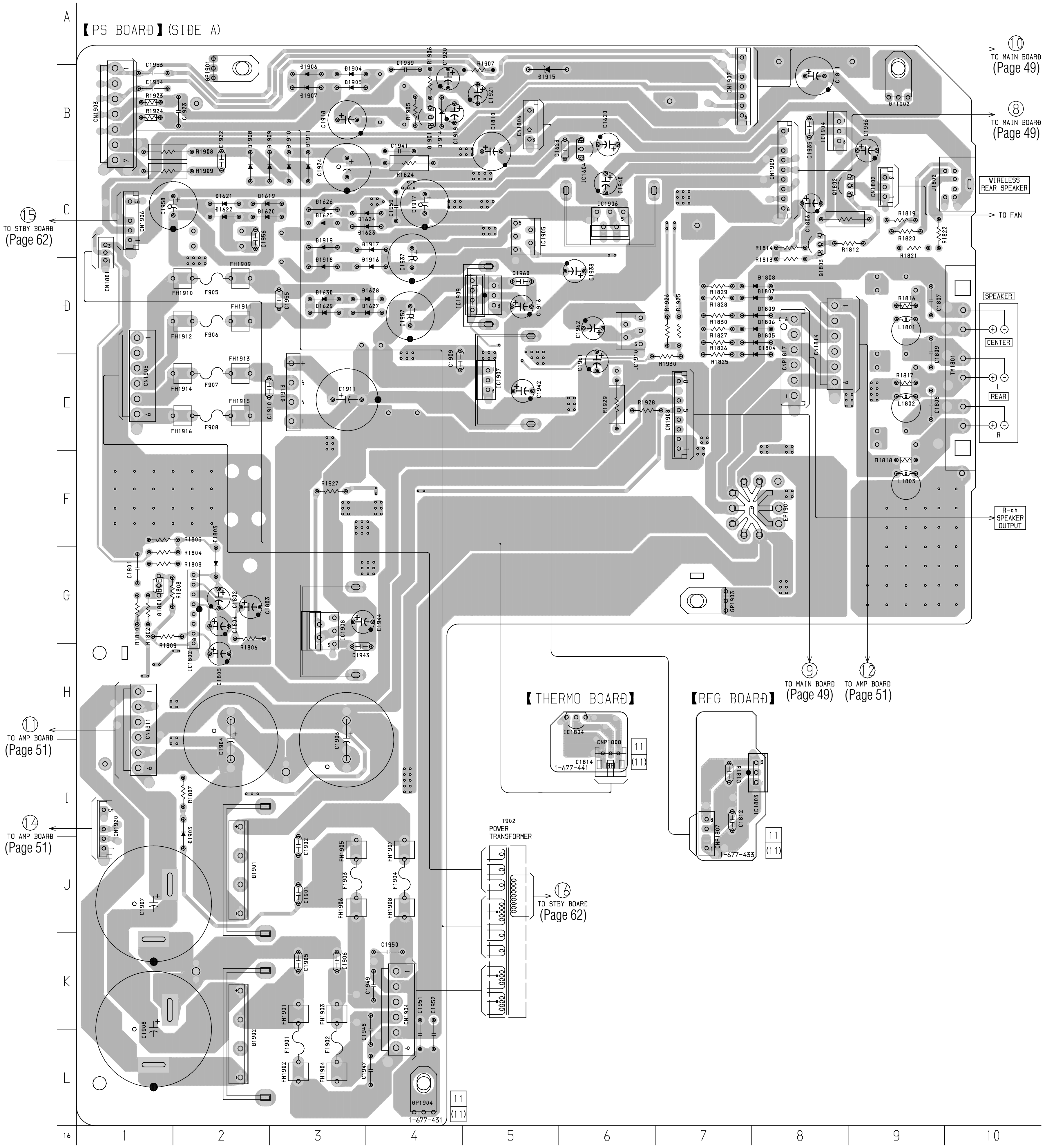
5-28. Printed Wiring Board – PS Section –

- See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.

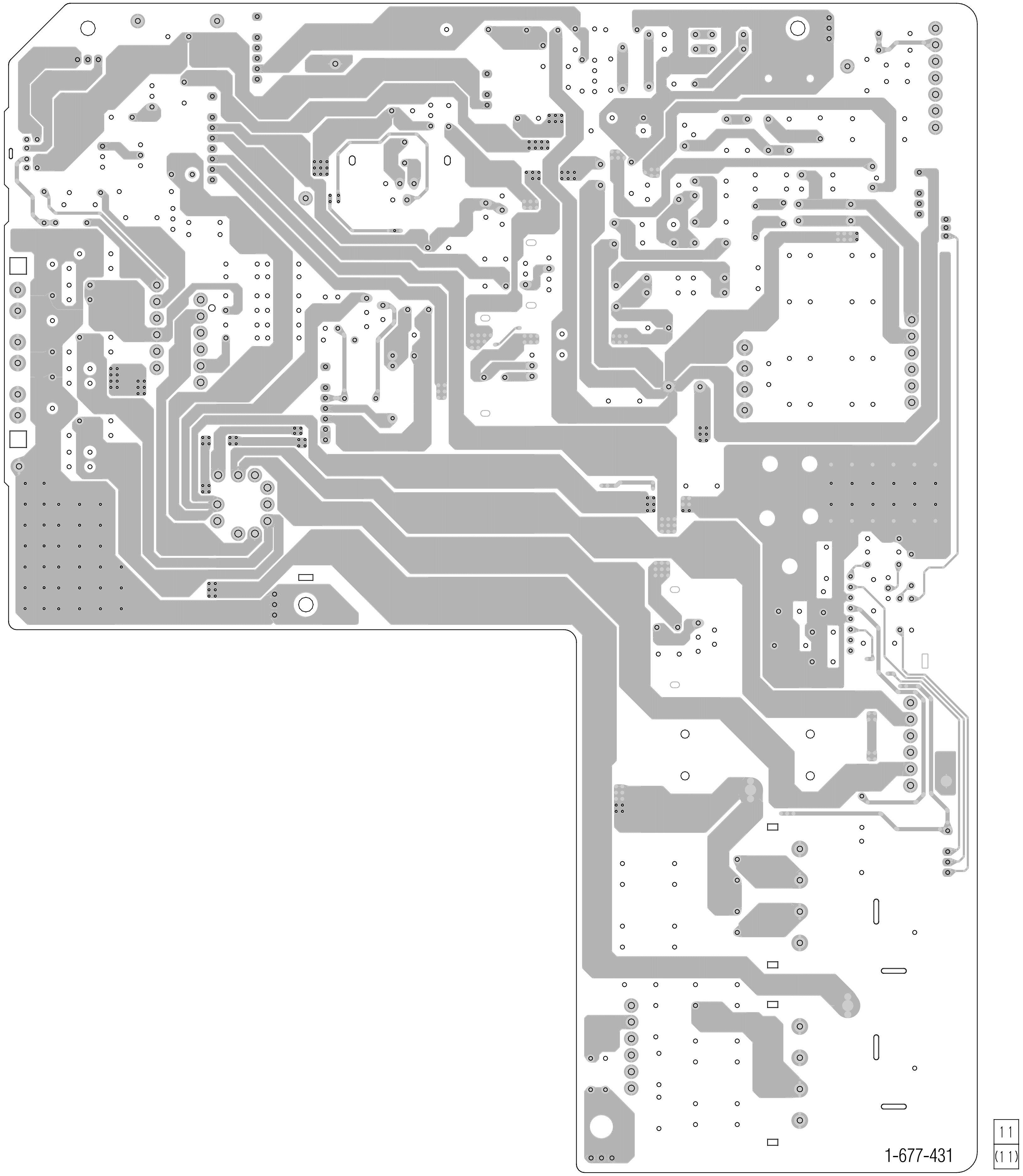
- **Semiconductor Location**

Ref. No.	Location
D1619	C-2
D1620	C-2
D1621	C-2
D1622	C-2
D1623	C-4
D1624	C-4
D1625	C-3
D1626	C-3
D1627	D-4
D1628	D-4
D1629	D-3
D1630	D-3
D1803	G-2
D1804	D-8
D1805	D-8
D1806	D-8
D1807	D-8
D1808	D-8
D1809	D-8
D1901	J-2
D1902	K-2
D1903	J-2
D1904	B-3
D1905	B-3
D1906	B-3
D1907	B-3
D1908	B-2
D1909	B-3
D1910	B-3
D1911	B-3
D1913	E-3
D1914	B-4
D1915	B-5
D1916	D-4
D1917	C-4
D1918	D-3
D1919	C-3
IC1604	B-6
IC1802	G-2
IC1904	B-8
IC1905	C-5
IC1906	C-6
IC1907	E-5
IC1908	G-3
IC1909	D-5
IC1910	D-6
Q1801	G-1
Q1802	C-9
Q1803	C-8
Q1901	B-4


【PS BOARD】(SIDE A)
⑩ TO MAIN BOARD (Page 49)
⑧ TO MAIN BOARD (Page 49)
WIRELESS REAR SPEAKER
TO FAN
SPEAKER
CENTER
L
REAR
R
R-ch SPEAKER OUTPUT
⑮ TO STBY BOARD (Page 62)
⑪ TO AMP BOARD (Page 51)
⑭ TO AMP BOARD (Page 51)
⑨ TO MAIN BOARD (Page 49)
⑫ TO AMP BOARD (Page 51)
【THERMO BOARD】
1-677-441
(11)
【REG BOARD】
1-677-433
(11)
T902 POWER TRANSFORMER
⑯ TO STBY BOARD (Page 62)
1-677-431
(11)
A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
7
8
9
10

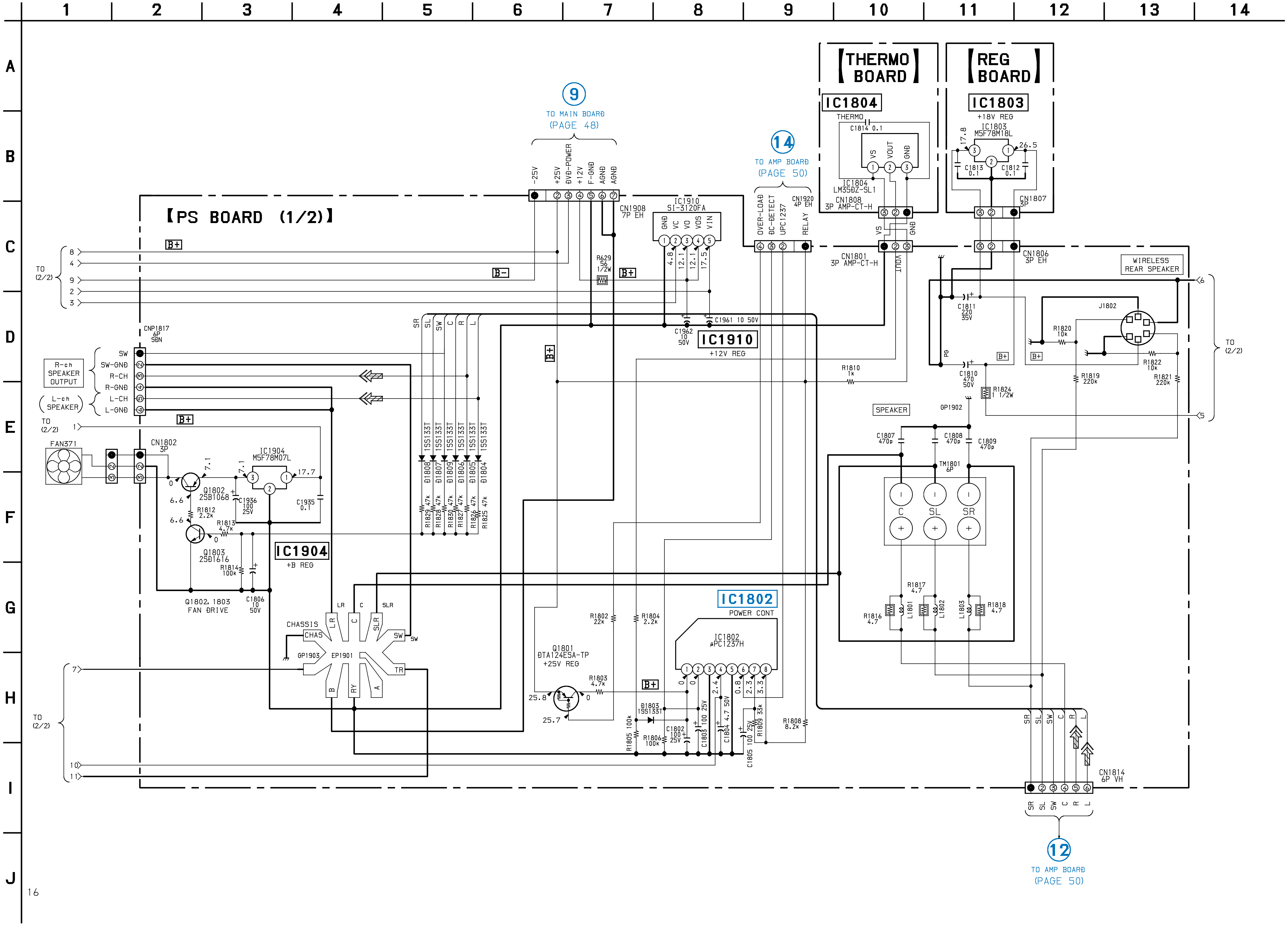
There are few cases that the part printed on this diagram isn't mounted in this model.

【PS BOARD】(SIDE B)

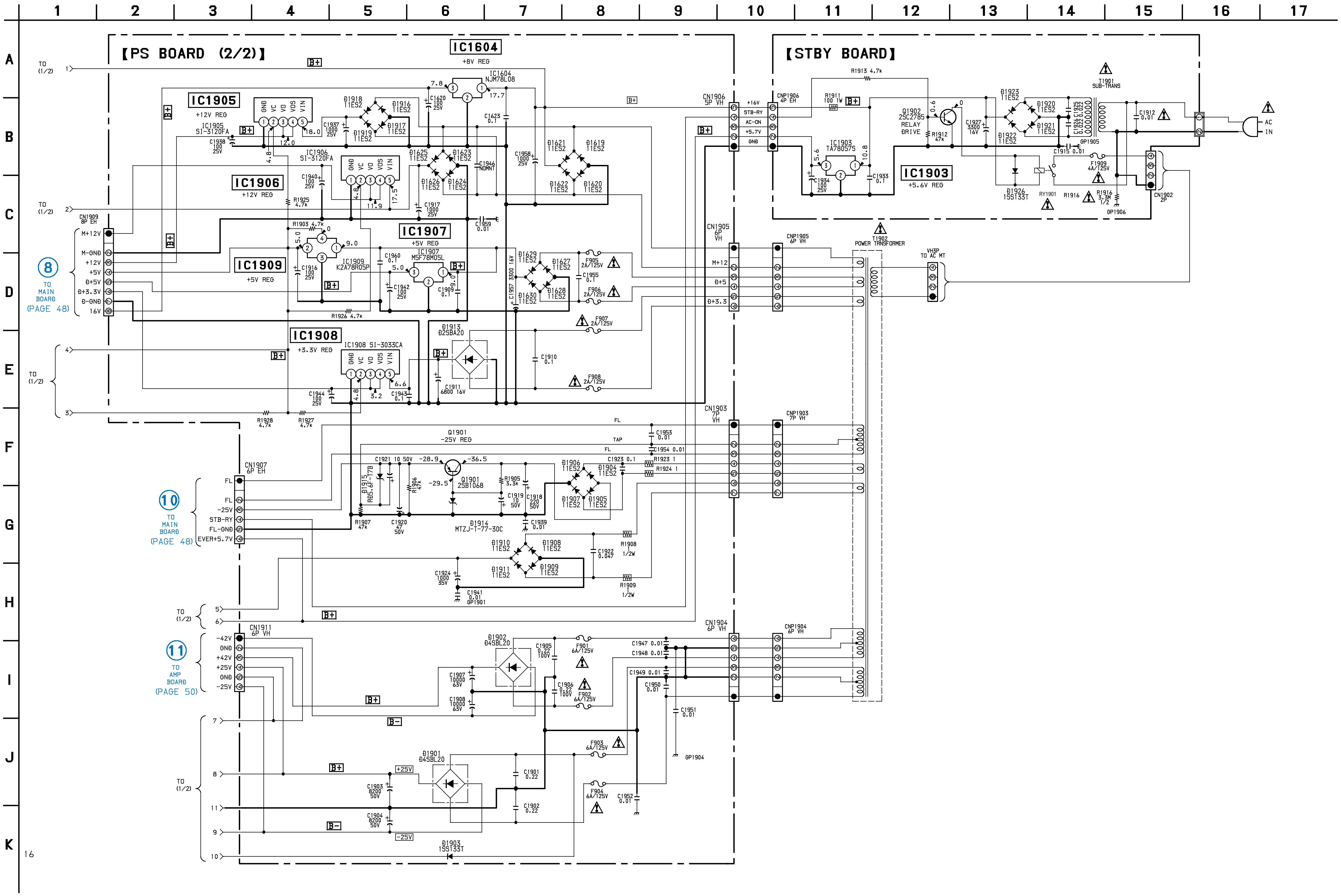


5-29. Schematic Diagram – PS (1/2) Section –

- See page 70 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
【PS BOARD (1/2)】
【THERMO BOARD】
【REG BOARD】
IC1804
THERMO
C1814 0.1
VS VOUT GND
IC1804 LM35DZ-SL1
CN1808 3P AMP-CT-H
IC1803
+18V REG
IC1803 M5F78M18L
17.8
26.5
C1813 0.1
C1812 0.1
CN1807 3P
⑨ TO MAIN BOARD (PAGE 48)
-25V +25V DVD-POWER +12V F-GND AGND AGND
CN1908 7P EH
IC1910 SI-3120FA
GND VC VO VOS VIN
4.8 12.1 12.1 17.5
⑭ TO AMP BOARD (PAGE 50)
OVER-LOAD DC-DETECT UPC1237 RELAY
CN1920 4P EH
CN1801 3P AMP-CT-H
VOUT
CN1806 3P EH
WIRELESS REAR SPEAKER
B+
B-
R629 56 1/2W
C1961 10 50V
C1962 10 50V
IC1910
+12V REG
TO (2/2)
CNP1817 6P SBN
SW SW-GND R-CH R-GND L-CH L-GND
R-ch SPEAKER OUTPUT
L-ch SPEAKER
SR SL SW C R L
1SS133T
D1808 D1807 D1809 D1806 D1805 D1804
R1829 47k R1828 47k R1830 47k R1827 47k R1826 47k R1825 47k
FAN371
CN1802 3P
IC1904 M5F78M07L
7.1 7.1 17.7
0 6.6 6.6 0
Q1802 2SB1068
C1936 100 25V
C1935 0.1
R1812 2.2k
R1813 4.7k
Q1803 2SD1616
R1814 100k
IC1904
+B REG
Q1802, 1803 FAN DRIVE
C1806 10 50V
CHASSIS
CHAS
GP1903
EP1901
LR C SLR SW TR B RY A
R1810 1k
C1811 220 35V
C1810 470 50V
R1824 1 1/2W
PG
J1802
R1820 10k
R1819 220k
R1822 10k
R1821 220k
SPEAKER
GP1902
C1807 470p
C1808 470p
C1809 470p
TM1801 6P
C SL SR
R1817 4.7
R1816 4.7
R1818 4.7
L1801 L1802 L1803
IC1802
POWER CONT
IC1802 μPC1237H
R1802 22k
R1804 2.2k
Q1801 DTA124ESA-TP +25V REG
R1803 4.7k
25.8 25.7 0
0 0 2.4 0.8 2.3 3.3
D1803 1SS133T
R1805 100k
R1806 100k
C1802 100 25V
C1803 100 25V
C1804 4.7 50V
C1805 100 25V
R1809 33k
R1808 8.2k
CN1814 6P VH
SR SL SW C R L
⑫ TO AMP BOARD (PAGE 50)
16

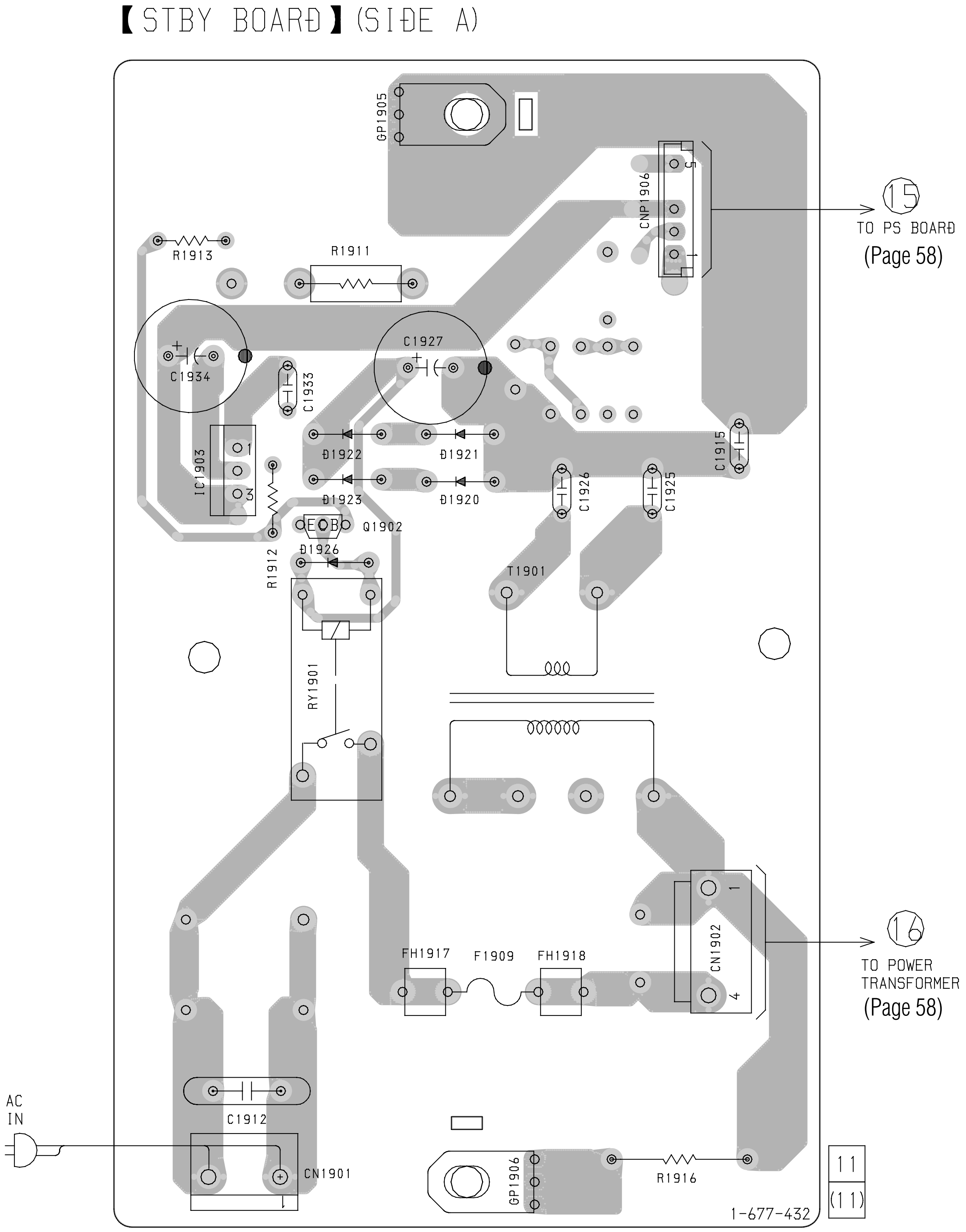
5-30. Schematic Diagram – PS (2/2) Section –

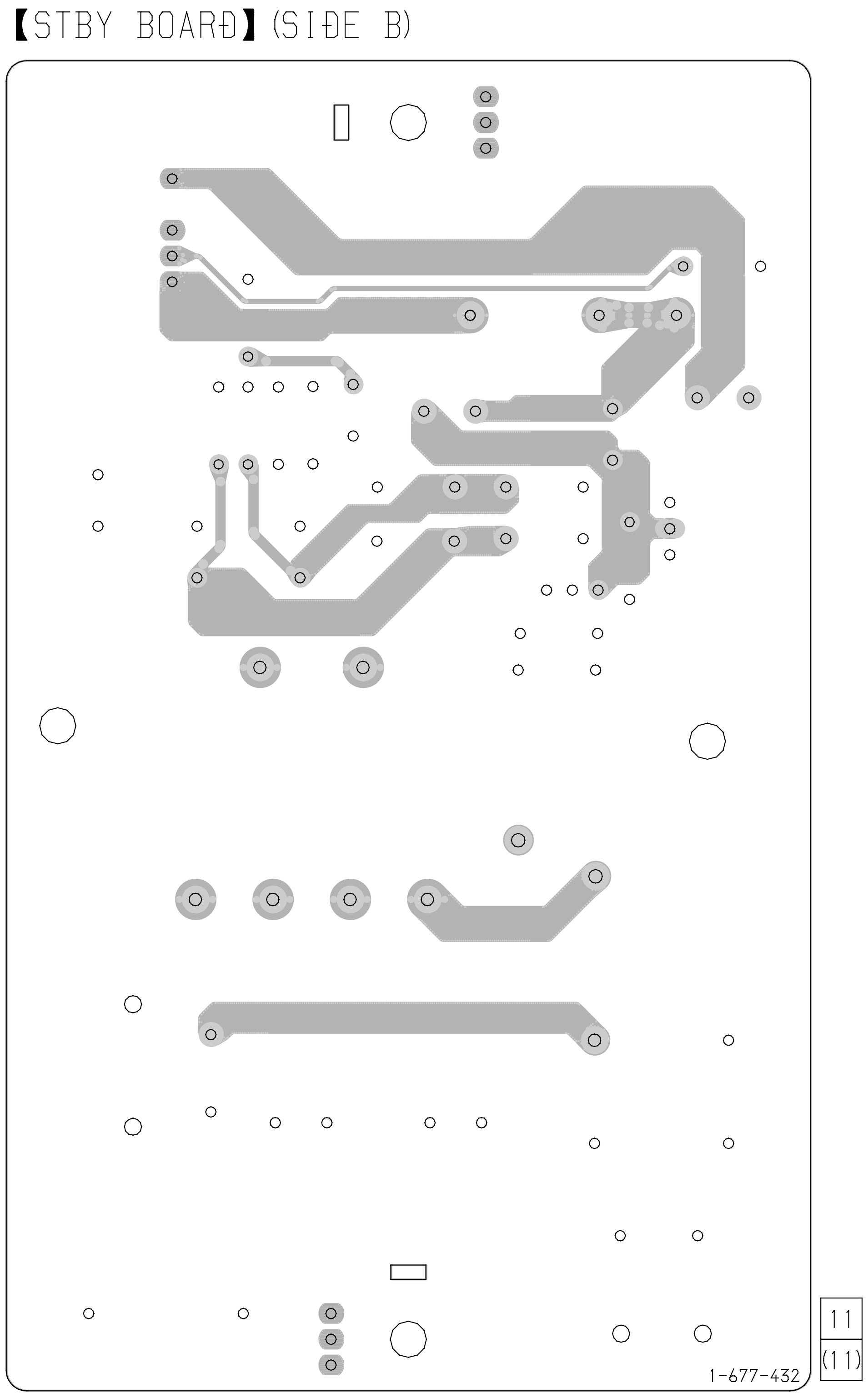

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
A
B
C
D
E
F
G
H
I
J
K
【PS BOARD (2/2)】
【STBY BOARD】
IC1604
+8V REG
IC1604 NJM78L08
IC1905
+12V REG
IC1905 SI-3120FA
IC1906
+12V REG
IC1906 SI-3120FA
IC1907
+5V REG
IC1907 M5F78M05L
IC1909
+5V REG
IC1909 K2A78R05P
IC1908
+3.3V REG
IC1908 SI-3033CA
IC1903
+5.6V REG
IC1903 TA78057S
Q1902 2SC2785 RELAY DRIVE
Q1901 -25V REG
Q1901 2SB1068
T1901 SUB-TRANS
T1902 POWER TRANSFORMER
VH3P TO AC MT
AC IN
TO (1/2)
TO MAIN BOARD (PAGE 48)
TO MAIN BOARD (PAGE 48)
TO AMP BOARD (PAGE 50)
CN1909 8P EH
M+12V
M-GND
+12V
+5V
D+5V
D+3.3V
D-GND
16V
CN1907 6P EH
FL
FL
-25V
STB-RY
FL-GND
EVER+5.7V
CN1911 6P VH
-42V
GND
+42V
+25V
GND
-25V
CN1906 5P VH
+16V
STB-RY
AC-ON
+5.7V
GND
CNP1906 4P EH
CN1905 6P VH
CNP1905 6P VH
M+12
D+5
D+3.3
CN1903 7P VH
CNP1903 7P VH
CN1904 6P VH
CNP1904 6P VH
CN1902 2P
F901 6A/125V
F902 6A/125V
F903 6A/125V
F904 6A/125V
F905 2A/125V
F906 2A/125V
F907 2A/125V
F908 2A/125V
F1909 4A/125V
D1901 D4SBL20
D1902 D4SBL20
D1903 1SS133T
D1913 D2SBA20
D1914 MTZJ-T-77-30C
D1915 RD5.6F-T7B
D1926 1SS133T
RY1901
R1913 4.7k
R1911 100 1W
R1912 47k
R1916 3.3M 1/2
R1908 1/2W
R1909 1/2W
R1903 4.7k
R1925 4.7k
R1926 4.7k
R1927 4.7k
R1928 4.7k
R1905 3.3k
R1907 47k
R1923 1
R1924 1
C1911 6800 16V
C1907 10000 63V
C1908 10000 63V
C1903 8200 50V
C1904 8200 50V
C1924 1000 35V
C1957 3300 16V
+25V
-25V
B+
B-
GP1901
GP1904
GP1905
GP1906
16

5-31. Printed Wiring Board – POWER Section –

- See page 28 for Circuit Boards Location.

There are few cases that the part printed on this diagram isn't mounted in this model.


【STBY BOARD】(SIDE A)
GP1905
CNP1906
5
1
15
TO PS BOARD
(Page 58)
R1913
R1911
C1934
C1927
C1933
IC1903
1
3
D1922
D1921
D1923
D1920
C1915
C1926
C1925
R1912
E C B
Q1902
D1926
T1901
RY1901
CN1902
1
4
16
TO POWER
TRANSFORMER
(Page 58)
FH1917
F1909
FH1918
AC
IN
C1912
CN1901
GP1906
R1916
1-677-432
11
(11)


【STBY BOARD】(SIDE B)
1-677-432
11
(11)

5-32. IC PIN FUNCTIONS

• IC202 DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR (MB911101APFV-G-BND) (DVD Board)

Pin No.	Pin Name	I/O	Function
1	DREQ2/PB5/CS1L	O	Analog filter gain control
2	DACK2/PB6/CS1H	O	VES gain control “H” : VES
3	PB7/$\overline{\text{DW1}}$	O	Rear CH boost “H” : rear boost
4	VCC3	–	Power supply
5	PA6/CLK	O	CPU clock out (25 MHz)
6	PA5/$\overline{\text{CS5}}$	O	Not used
7	PA4/$\overline{\text{CS4}}$	O	Chip select signal for ARP, SERVO DSP and HGA
8	EOP1/PA3/$\overline{\text{CS3}}$	O	Chip select signal for SDRAM and AV DEC
9	PA2/$\overline{\text{CS2}}$	O	Chip select signal for REG and AV DEC
10	PA1/$\overline{\text{CS1}}$	O	Chip select signal for external SRAM
11	$\overline{\text{CS0}}$	O	Chip select signal for external FLASH ROM
12	$\overline{\text{NMI}}$	I	Not used (fixed at “H”)
13	$\overline{\text{HST}}$	I	Not used (fixed at “H”)
14	$\overline{\text{RST}}$	I	Reset signal input from IF CON
15	GND	–	Ground
16	MD0	I	Input of mode select 0 (fixed at “1”)
17	MD1	I	Input of mode select 1 (fixed at “0”)
18	MD2	I	Input of mode select 2 (fixed at “0”)
19	P80/RDY	I	Wait signal input
20	P81/$\overline{\text{BGRNT}}$	I	Test terminal (fixed at “H”)
21	P82/BRQ	I	Test terminal (fixed at “L”)
22	$\overline{\text{RD}}$	O	Read enable signal output
23	$\overline{\text{WR0}}$	O	High byte write enable signal output (16 bit and 8 bit)
24	P85/$\overline{\text{WR1}}$	O	Low byte write enable signal output (16 bit only)
25	P20/D16	I/O	Data bus D0 (16 bit)
26	P21/D17	I/O	Data bus D1 (16 bit)
27	P22/D18	I/O	Data bus D2 (16 bit)
28	P23/D19	I/O	Data bus D3 (16 bit)
29	P24/D20	I/O	Data bus D4 (16 bit)
30	P25/D21	I/O	Data bus D5 (16 bit)
31	P26/D22	I/O	Data bus D6 (16 bit)
32	P27/D23	I/O	Data bus D7 (16 bit)
33	D24	I/O	Data bus D8 (16 bit), D0 (8 bit)
34	D25	I/O	Data bus D9 (16 bit), D1 (8 bit)
35	D26	I/O	Data bus D10 (16 bit), D2 (8 bit)
36	D27	I/O	Data bus D11 (16 bit), D3 (8 bit)
37	D28	I/O	Data bus D12 (16 bit), D4 (8 bit)
38	D29	I/O	Data bus D13 (16 bit), D5 (8 bit)
39	D30	I/O	Data bus D14 (16 bit), D6 (8 bit)
40	GND	–	Ground
41	D31	I/O	Data bus D15 (16 bit), D7 (8 bit)
42	A00	–	Address bus A0
43	VCC5	O	Power supply
44	A01	O	Address bus A1
45	A02	O	Address bus A2
46	A03	O	Address bus A3
47	A04	O	Address bus A4
48	A05	O	Address bus A5
49	A06	O	Address bus A6
50	A07	O	Address bus A7

Pin No.	Pin Name	I/O	Function
51	A08	O	Address bus A8
52	A09	O	Address bus A9
53	A10	O	Address bus A10
54	A11	O	Address bus A11
55	A12	O	Address bus A12
56	A13	O	Address bus A13
57	A14	O	Address bus A14
58	A15	O	Address bus A15
59	A16/P60	O	Address bus A16
60	A17/P61	O	Address bus A17
61	A18/P62	O	Address bus A18
62	A19/P63	O	Address bus A19
63	A20/P64	O	Address bus A20
64	A21/P65	O	Address bus A21
65	GND	–	Ground
66	A22/P66	O	PLL IC control output “H” : DOUBLE
67	A23/P67	I	DIAG mode signal input “L” : DIAG
68	A24/EOP0	I	Not used
69	AVCC	–	Power supply
70	AVRH	–	Reference power supply (+3.3 V)
71	AVSS/AVRL	–	Ground
72	AN0	I	Set of mode 0
73	AN1	I	Set of mode 1
74	AN2	I	Set of mode 2
75	AN3	I	Set of mode 3 (fixed at “H”)
76	SI0/TRG0/PF0	I	Serial data input from IF CON and EEPROM
77	SI1/TRG1/PF1	O	Serial data output to IF CON and EEPROM
78	SC0/PF2/OCPA3	O	Serial clock output to IF CON and EEPROM
79	SI1/TRG2/PF3	I	Serial bus 1 (for data input)
80	SO1/TRG3/PF4	O	Serial bus 1 (for data output)
81	SI2/PF5/OCPA1	I	Serial bus 2 (for data input)
82	SO2/PF6/OCPA2	O	Serial bus 2 (for data output)
83	PF7/OCPA0/$\overline{\text{ATG}}$	O	Reset signal output
84	DACK1/PE7	O	Output of DMA-ACK 0 to AV DEC
85	DACK0/PE0	O	Output of DMA-ACK 1 to AV DEC
86	DREQ1/PE5	I	Input of DMA-REQ 0 from AV DEC
87	DREQ0/PE4	I	Input of DMA-REQ 1 from AV DEC
88	INT3/PE3/SC2	I	Input of interrupt from HGA
89	INT2/PE2/SC1	O	Serial clock output
90	VSS	–	Ground
91	X1	O	Clock output (12.5 MHz)
92	X0	I	Clock input (12.5 MHz)
93	VCC5	–	Power supply
94	INT1/PE1	I	Input of interrupt ARP and SERVO DSP
95	INT0/PE0	I	Input of interrupt from AV DEC
96	RAS0/PB0	I	Rear panel lime input select (“H” : DISC “L” : EXT)
97	CS0L/PB1	O	Chip select signal to IF CON
98	CS0H/PB2	O	Chip select signal to DAC (Lt and Rt)
99	$\overline{\text{DW0}}$/PB3	O	Chip select signal to DAC (L and R)
100	RAS1/PB4	O	DVD/CD select (“H” : 44.1 kHz “L” : 48 kHz)

• IC903 I/F MICROCOMPUTER (M30622MA-A38FP) (DVD Board)

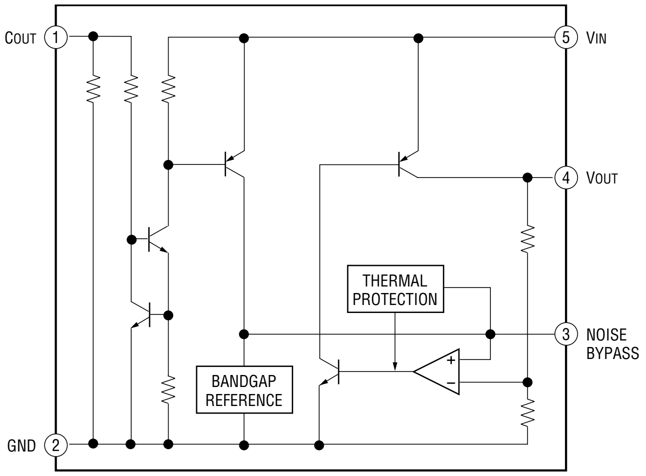
Pin No.	Pin Name	I/O	Function
1	IFSIO	O	Data output for SYS COM
2	IFSCO	I	Clock input for SYS COM
3	YSSCSB	O	Chip select for SUB DSP (YSS912)
4	YSS_CS	O	Chip select for MIN DSP (YSS912)
5	YSS_CI	O	Data output for DSP (YSS912)
6	YSS_SO	I	Data input for DSP (YSS912)
7	YSSCK	O	Clock for DSP (YSS912)
8	(GND)	–	Ground
9	CNVSS	–	CNVSS
10	YSSIC	O	Reset for DSP (YSS912)
11	AN/DIG	O	Analog/Digital
12	RESET	–	Reset
13	XOUT	–	16 MHz
14	VSS	–	Ground
15	XIN	–	16 MHz
16	VCC	–	+5 V
17	NMI	I	Not used
18	STOP	I	STOP input
19	ASEL1	O	Analog select
20	ASEL2	O	Analog select
21	AUMUTE	O	Audio mute
22	VMUTE	O	Video mute
23	ASEL1	O	Video select
24	VSEL2	O	Video select
25	D1/P1	O	Dimmer
26	D2/P2	O	Dimmer
27	P3	I	Not used
28	P4	I	Not used
29	NO USE	I	Not used
30	TSTPORT	I	Test port
31	TXD1	O	For flash write
32	RXD1	O	For flash write
33	CLK1	O	For flash write
34	RTS1	O	For flash write
35	FLDATA	O	Data output for IC100 (LC75824)
36	FLINH	O	Indicator lamp terminal for IC100 (LC75824)
37	FLCLK	O	Clock for IC100 (LC75824)
38	FL_CS	O	Chip select for IC100 (LC75824)
39	STBY	O	Standby LED
40	REAR-SW	O	Rear switch
41	HOLD	O	For flash write
42	SIRCS	I	SIRCS
43	F_RLT	O	Full relay
44	POWRY	O	Power relay
45	SWMODE/SLEEP	O	Sleep for digital amplifier
46	WR	O	For flash write
47	TUNCLK	O	Clock for LC72137
48	TUNCE	O	Chip enable for LC72137
49	TUNSTE	I	Stero detection for LC72137
50	FM750N	O	AM/FM switch for LC72137

Pin No.	Pin Name	I/O	Function
51	TUN_DO	O	Data output for LC72137
52	TUN_DI	I	Data input for LC72137
53	TUNED	O	Tuning end for LC72137
54	FAULT/BTCE1	O	FAULT for digital amplifier
55	PROTECT/BTCE2	O	PROTECT for digital amplifier
56	VOL_CE	O	Chip enable for IC507 (TC9482)
57	VOL_DAT	O	Data output for IC507 (TC9482)
58	VOL_CLK	O	Clock for IC507 (TC9482)
59	SWMUTE	O	Not used
60	CS_MUTE	O	Not used
61	LR_MUTE	O	Not used
62	VCC	–	+5 V
63	AMP_MUTE	O	Mute for digital amplifier
64	VSS	–	Ground
65	HP_MUTE	–	MUTE during head phone IN
66	HP_SW	I	Headphone IN/OUT
67	S_MUTE	O	Soft mute for IC906 (AK4527)
68	PD	O	Reset for IC906 (AK4527)
69	CDT1	O	Data output for IC906 (AK4527)
70	CLK	O	Clock for IC906 (AK4527)
71	CS	O	Chip select for IC906 (AK4527)
72	RDS1	O	Not used
73	IF_OK	O	SYS COM data transmission/reception use
74	XVIFCS	I	SYS COM data transmission use
75	RDS2	I	Not used
76	XFIFNT	O	SYS COM data transmission start use
77	XFRRST	O	Reset for SYS COM
78	DVDPOW	O	Power ON/OFF for SYS COM
79	MODEL4	I	Distinguishing destination
80	MODEL3	I	Distinguishing destination
81	MODEL2	I	Distinguishing destination
82	DIRXMD	O	Reset for IC907 (LC89055)
83	DIRCLK	O	Clock for IC907 (LC89055)
84	DIRLAT	O	Latch for IC907 (LC89055)
85	DIRWRT	O	Data output for IC907 (LC89055)
86	DIRRDT	I	Data input for IC907 (LC89055)
87	DIRERR	I	Error for IC907 (LC89055)
88	ZERO	I	ZERO data for IC907 (LC89055)
89	NO USE	I	Not used
90	+3.3V	I	Not used
91	+5V	I	Not used
92	Key 2	I	KEY input
93	Key 1	I	KEY input
94	ENB	I	Encoder
95	ENA	I	Encoder
96	AVSS	–	Ground for AD
97	NO USE	I	Not used
98	VREF	–	+5 V for AD
99	AVCC	–	+5 V for AD
100	IFSDO	I	Data input for SYS COM

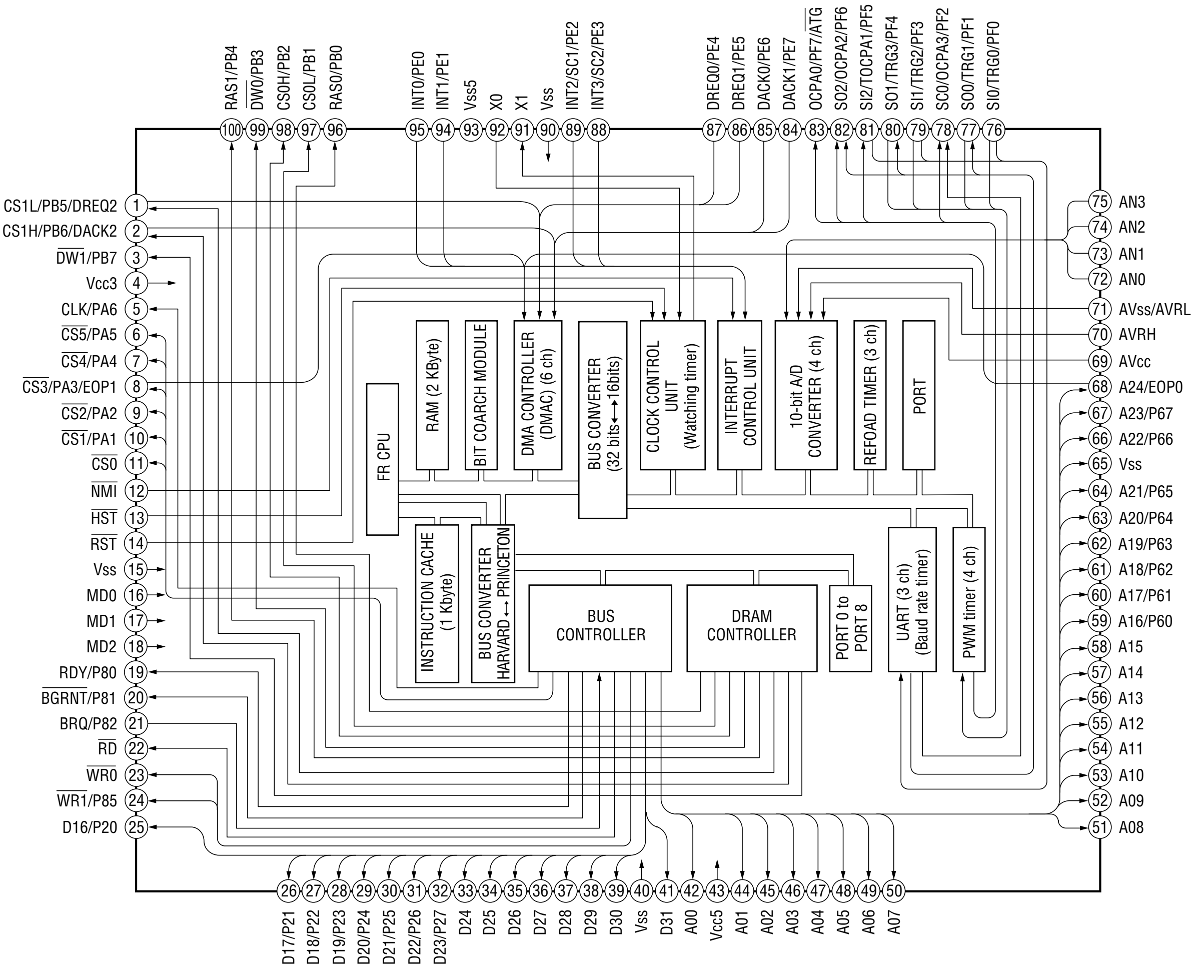
5-33. IC BLOCK DIAGRAMS

• DVD BOARD

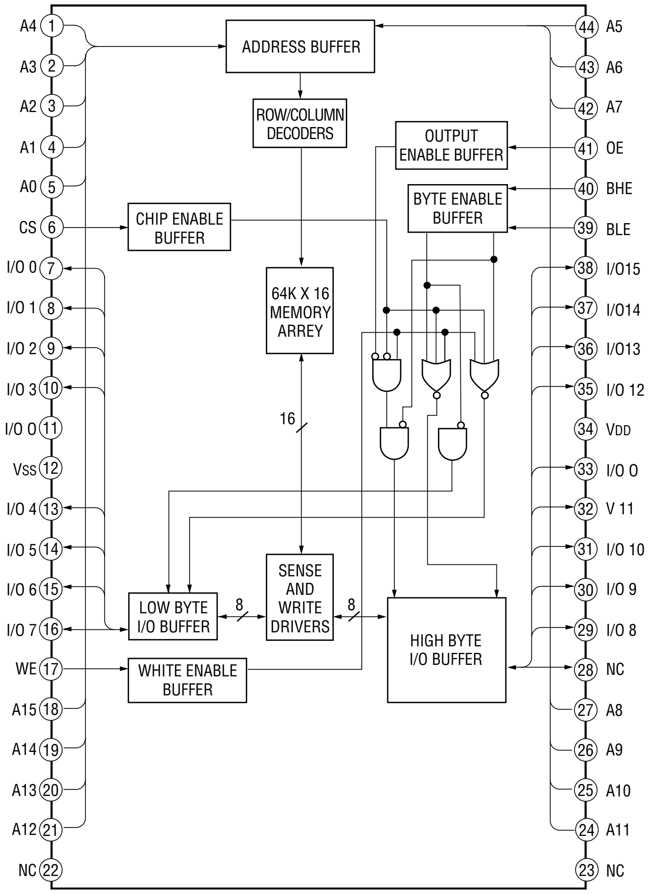
IC005, 404 NJM2370U33-TE2


COUT 1
VIN 5
VOUT 4
THERMAL PROTECTION
NOISE BYPASS 3
BANDGAP REFERENCE
GND 2

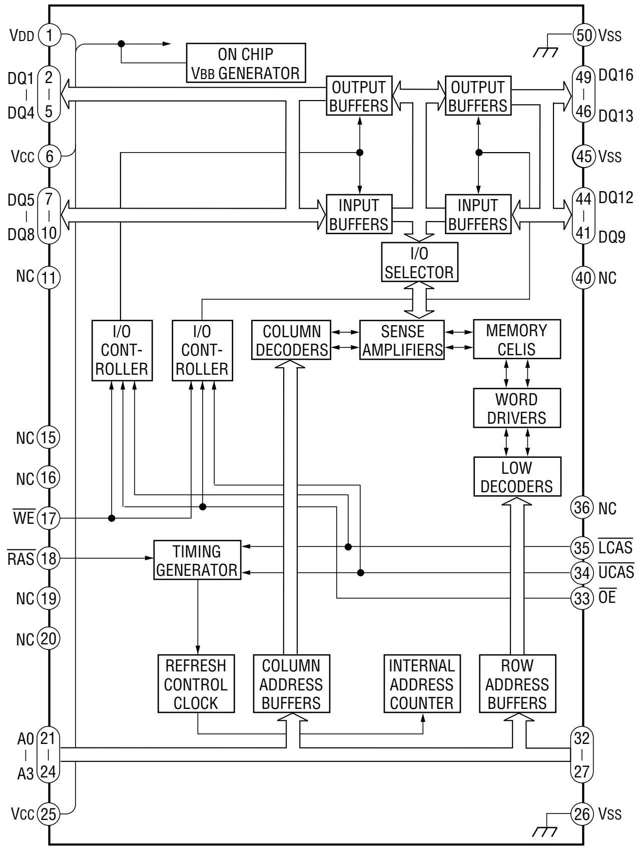
IC202 MB91101APFV-G-BND


RAS1/PB4 100
DW0/PB3 99
CS0H/PB2 98
CS0L/PB1 97
RAS0/PB0 96
INT0/PE0 95
INT1/PE1 94
Vss5 93
X0 92
X1 91
Vss 90
INT2/SC1/PE2 89
INT3/SC2/PE3 88
DREQ0/PE4 87
DREQ1/PE5 86
DACK0/PE6 85
DACK1/PE7 84
OCPA0/PF7/ATG 83
SO2/OCPA2/PF6 82
SI2/TOCPA1/PF5 81
SO1/TRG3/PF4 80
SI1/TRG2/PF3 79
SC0/OCPA3/PF2 78
SO0/TRG1/PF1 77
SI0/TRG0/PF0 76
CS1L/PB5/DREQ2 1
CS1H/PB6/DACK2 2
DW1/PB7 3
Vcc3 4
CLK/PA6 5
CS5/PA5 6
CS4/PA4 7
CS3/PA3/EOP1 8
CS2/PA2 9
CS1/PA1 10
CS0 11
NMI 12
HST 13
RST 14
Vss 15
MD0 16
MD1 17
MD2 18
RDY/P80 19
BGRNT/P81 20
BRQ/P82 21
RD 22
WR0 23
WR1/P85 24
D16/P20 25
75 AN3
74 AN2
73 AN1
72 AN0
71 AVss/AVRL
70 AVRH
69 AVcc
68 A24/EOP0
67 A23/P67
66 A22/P66
65 Vss
64 A21/P65
63 A20/P64
62 A19/P63
61 A18/P62
60 A17/P61
59 A16/P60
58 A15
57 A14
56 A13
55 A12
54 A11
53 A10
52 A09
51 A08
26 D17/P21
27 D18/P22
28 D19/P23
29 D20/P24
30 D21/P25
31 D22/P26
32 D23/P27
33 D24
34 D25
35 D26
36 D27
37 D28
38 D29
39 D30
40 Vss
41 D31
42 A00
43 Vcc5
44 A01
45 A02
46 A03
47 A04
48 A05
49 A06
50 A07
FR CPU
RAM (2 KByte)
BIT COARCH MODULE
DMA CONTROLLER (DMAC) (6 ch)
BUS CONVERTER (32 bits↔16bits)
CLOCK CONTROL UNIT (Watching timer)
INTERRUPT CONTROL UNIT
10-bit A/D CONVERTER (4 ch)
REFOAD TIMER (3 ch)
PORT
INSTRUCTION CACHE (1 Kbyte)
BUS CONVERTER HARVARD↔PRINCETON
BUS CONTROLLER
DRAM CONTROLLER
PORT 0 to PORT 8
UART (3 ch) (Baud rate timer)
PWM timer (4 ch)

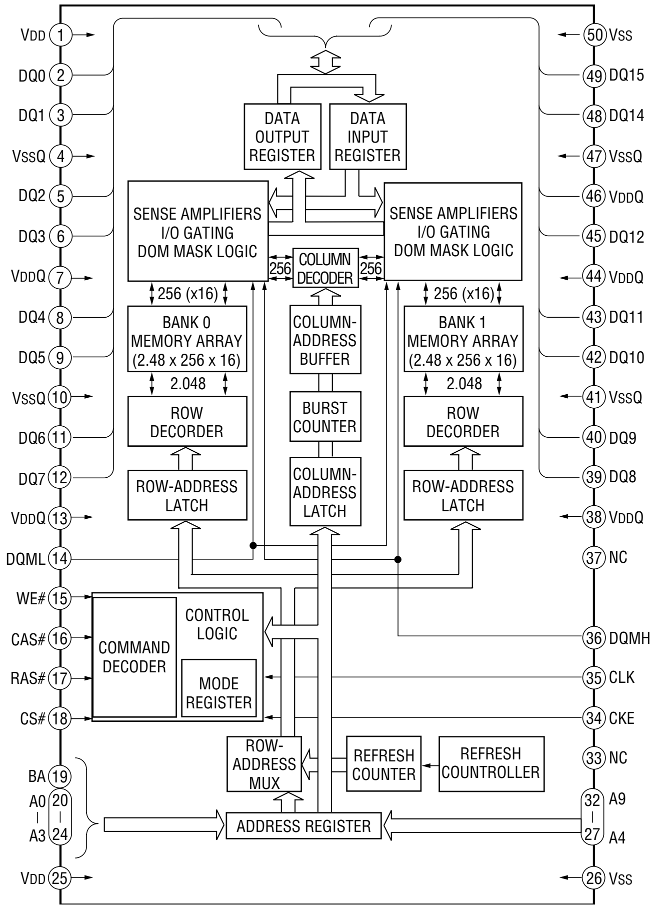
IC204 IDT71V016S20PHAU-TL


A4 1
A3 2
A2 3
A1 4
A0 5
CS 6
I/O 0 7
I/O 1 8
I/O 2 9
I/O 3 10
I/O 0 11
VSS 12
I/O 4 13
I/O 5 14
I/O 6 15
I/O 7 16
WE 17
A15 18
A14 19
A13 20
A12 21
NC 22
44 A5
43 A6
42 A7
41 OE
40 BHE
39 BLE
38 I/O15
37 I/O14
36 I/O13
35 I/O 12
34 VDD
33 I/O 0
32 V 11
31 I/O 10
30 I/O 9
29 I/O 8
28 NC
27 A8
26 A9
25 A10
24 A11
23 NC
ADDRESS BUFFER
ROW/COLUMN DECODERS
OUTPUT ENABLE BUFFER
BYTE ENABLE BUFFER
CHIP ENABLE BUFFER
64K X 16 MEMORY ARREY
16
SENSE AND WRITE DRIVERS
LOW BYTE I/O BUFFER
8
8
HIGH BYTE I/O BUFFER
WHITE ENABLE BUFFER

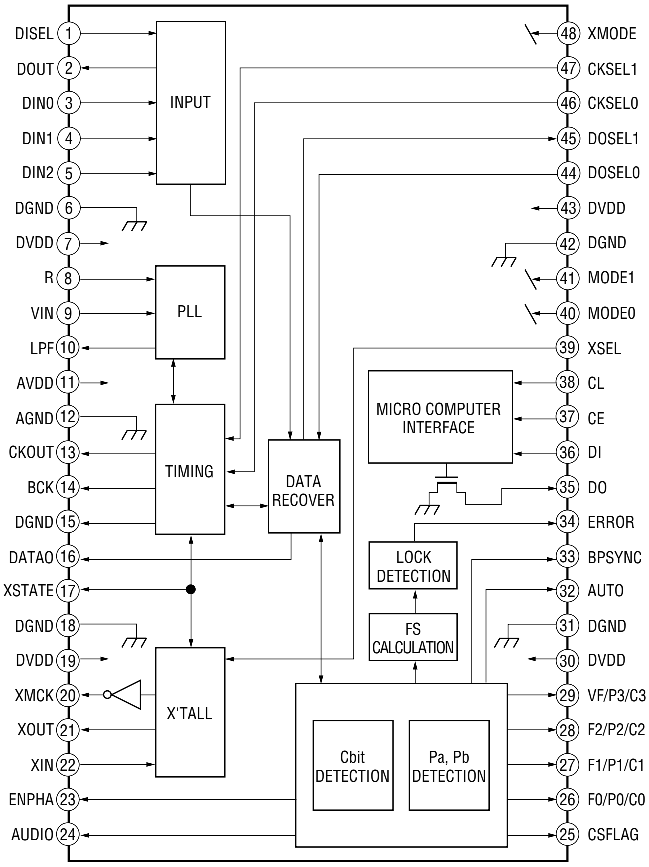
IC304 MSM51V18160D-60TSKR1


VDD 1
DQ1 2
DQ4 5
VCC 6
DQ5 7
DQ8 10
NC 11
NC 15
NC 16
WE 17
RAS 18
NC 19
NC 20
A0 21
A3 24
VCC 25
50 VSS
49 DQ16
46 DQ13
45 VSS
44 DQ12
41 DQ9
40 NC
36 NC
35 LCAS
34 UCAS
33 OE
32
27
26 VSS
ON CHIP VBB GENERATOR
OUTPUT BUFFERS
OUTPUT BUFFERS
INPUT BUFFERS
INPUT BUFFERS
I/O SELECTOR
I/O CONT-ROLLER
I/O CONT-ROLLER
COLUMN DECODERS
SENSE AMPLIFIERS
MEMORY CELIS
WORD DRIVERS
LOW DECODERS
TIMING GENERATOR
REFRESH CONTROL CLOCK
COLUMN ADDRESS BUFFERS
INTERNAL ADDRESS COUNTER
ROW ADDRESS BUFFERS

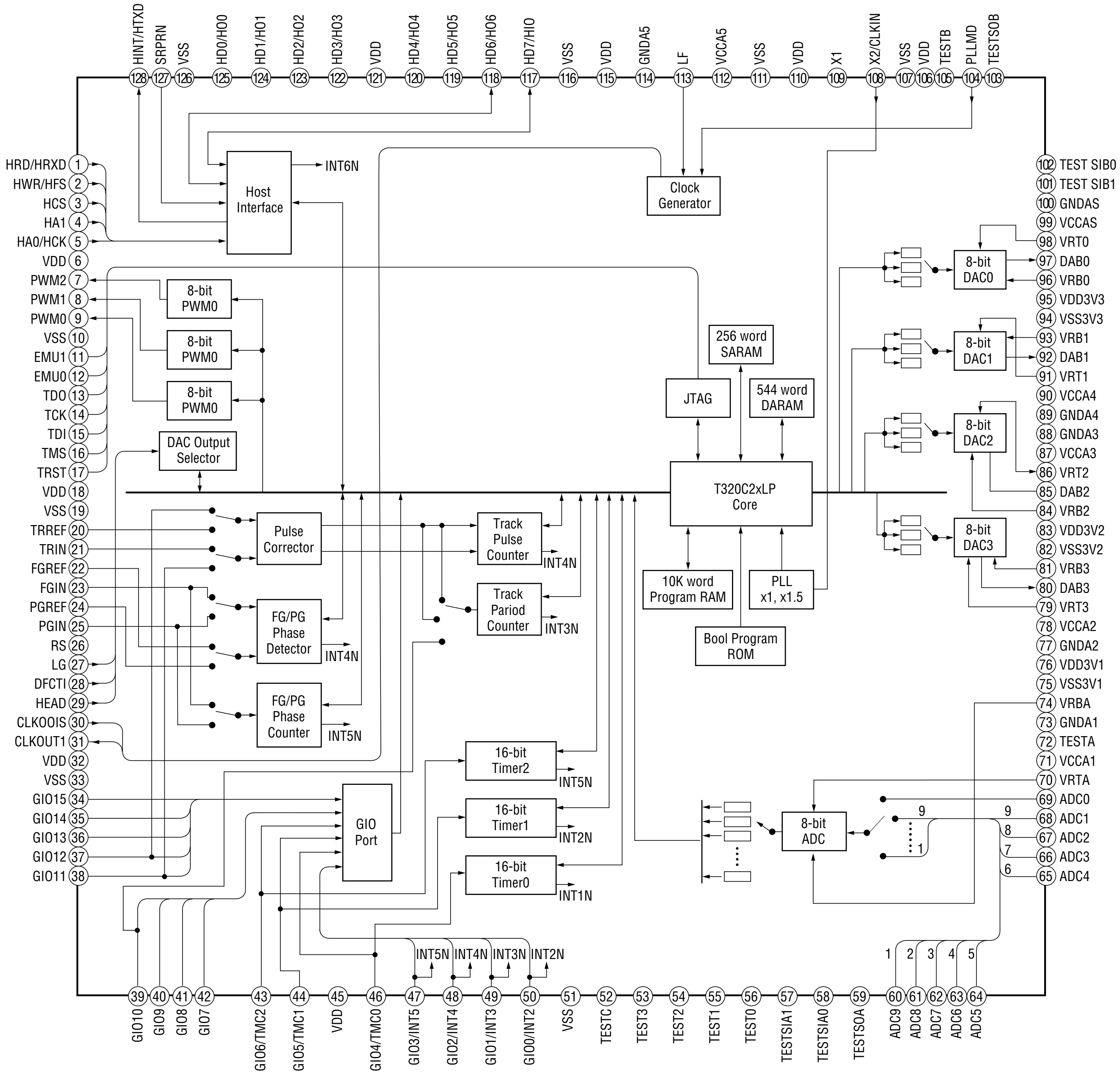
IC402, 403 MSM56V16160D-10TS-K


VDD 1
DQ0 2
DQ1 3
VSSQ 4
DQ2 5
DQ3 6
VDDQ 7
DQ4 8
DQ5 9
VSSQ 10
DQ6 11
DQ7 12
VDDQ 13
DQML 14
WE# 15
CAS# 16
RAS# 17
CS# 18
BA 19
A0 20
A3 24
VDD 25
50 VSS
49 DQ15
48 DQ14
47 VSSQ
46 VDDQ
45 DQ12
44 VDDQ
43 DQ11
42 DQ10
41 VSSQ
40 DQ9
39 DQ8
38 VDDQ
37 NC
36 DQMH
35 CLK
34 CKE
33 NC
32 A9
27 A4
26 VSS
DATA OUTPUT REGISTER
DATA INPUT REGISTER
SENSE AMPLIFIERS I/O GATING DOM MASK LOGIC
SENSE AMPLIFIERS I/O GATING DOM MASK LOGIC
256
COLUMN DECODER
256
256 (x16)
256 (x16)
BANK 0 MEMORY ARRAY (2.48 x 256 x 16)
COLUMN-ADDRESS BUFFER
BANK 1 MEMORY ARRAY (2.48 x 256 x 16)
2.048
2.048
ROW DECODER
BURST COUNTER
ROW DECODER
ROW-ADDRESS LATCH
COLUMN-ADDRESS LATCH
ROW-ADDRESS LATCH
COMMAND DECODER
CONTROL LOGIC
MODE REGISTER
ROW-ADDRESS MUX
REFRESH COUNTER
REFRESH COUNTROLLER
ADDRESS REGISTER

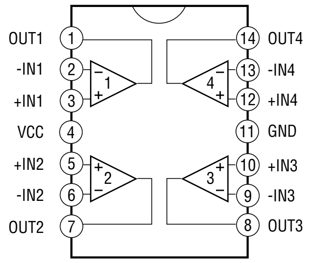
IC907 LC89055W-RA8


DISEL 1
DOUT 2
DIN0 3
DIN1 4
DIN2 5
DGND 6
DVDD 7
R 8
VIN 9
LPF 10
AVDD 11
AGND 12
CKOUT 13
BCK 14
DGND 15
DATA0 16
XSTATE 17
DGND 18
DVDD 19
XMCK 20
XOUT 21
XIN 22
ENPHA 23
AUDIO 24
48 XMODE
47 CKSEL1
46 CKSEL0
45 DOSEL1
44 DOSEL0
43 DVDD
42 DGND
41 MODE1
40 MODE0
39 XSEL
38 CL
37 CE
36 DI
35 DO
34 ERROR
33 BPSYNC
32 AUTO
31 DGND
30 DVDD
29 VF/P3/C3
28 F2/P2/C2
27 F1/P1/C1
26 F0/P0/C0
25 CSFLAG
INPUT
PLL
TIMING
DATA RECOVER
X'TALL
MICRO COMPUTER INTERFACE
LOCK DETECTION
FS CALCULATION
Cbit DETECTION
Pa, Pb DETECTION

IC701 CXD8791AQ

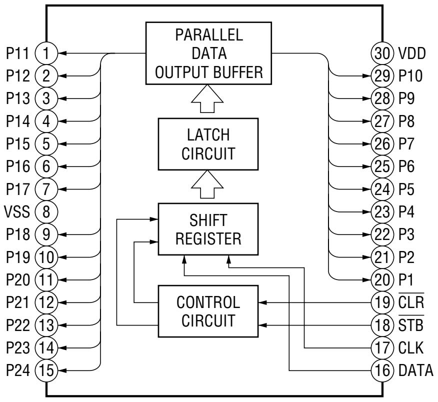

HINT/HTXD 128
SRPRN 127
VSS 126
HD0/HO0 125
HD1/HO1 124
HD2/HO2 123
HD3/HO3 122
VDD 121
HD4/HO4 120
HD5/HO5 119
HD6/HO6 118
HD7/HIO 117
VSS 116
VDD 115
GNDA5 114
LF 113
VCCA5 112
VSS 111
VDD 110
X1 109
X2/CLKIN 108
VSS 107
VDD 106
TESTB 105
PLLMD 104
TESTSOB 103
HRD/HRXD 1
HWR/HFS 2
HCS 3
HA1 4
HA0/HCK 5
VDD 6
PWM2 7
PWM1 8
PWM0 9
VSS 10
EMU1 11
EMU0 12
TDO 13
TCK 14
TDI 15
TMS 16
TRST 17
VDD 18
VSS 19
TRREF 20
TRIN 21
FGREF 22
FGIN 23
PGREF 24
PGIN 25
RS 26
LG 27
DFCTI 28
HEAD 29
CLKOOIS 30
CLKOUT1 31
VDD 32
VSS 33
GIO15 34
GIO14 35
GIO13 36
GIO12 37
GIO11 38
Host Interface
INT6N
Clock Generator
8-bit PWM0
8-bit PWM0
8-bit PWM0
DAC Output Selector
256 word SARAM
JTAG
544 word DARAM
T320C2xLP Core
Pulse Corrector
Track Pulse Counter
INT4N
Track Pariod Counter
INT3N
10K word Program RAM
PLL x1, x1.5
Bool Program ROM
FG/PG Phase Detector
INT4N
FG/PG Phase Counter
INT5N
16-bit Timer2
INT5N
16-bit Timer1
INT2N
16-bit Timer0
INT1N
GIO Port
8-bit DAC0
8-bit DAC1
8-bit DAC2
8-bit DAC3
8-bit ADC
9
9
8
7
6
1
1
2
3
4
5
INT5N
INT4N
INT3N
INT2N
102 TEST SIB0
101 TEST SIB1
100 GNDAS
99 VCCAS
98 VRT0
97 DAB0
96 VRB0
95 VDD3V3
94 VSS3V3
93 VRB1
92 DAB1
91 VRT1
90 VCCA4
89 GNDA4
88 GNDA3
87 VCCA3
86 VRT2
85 DAB2
84 VRB2
83 VDD3V2
82 VSS3V2
81 VRB3
80 DAB3
79 VRT3
78 VCCA2
77 GNDA2
76 VDD3V1
75 VSS3V1
74 VRBA
73 GNDA1
72 TESTA
71 VCCA1
70 VRTA
69 ADC0
68 ADC1
67 ADC2
66 ADC3
65 ADC4
39 GIO10
40 GIO9
41 GIO8
42 GIO7
43 GIO6/TMC2
44 GIO5/TMC1
45 VDD
46 GIO4/TMC0
47 GIO3/INT5
48 GIO2/INT4
49 GIO1/INT3
50 GIO0/INT2
51 VSS
52 TESTC
53 TEST3
54 TEST2
55 TEST1
56 TEST0
57 TESTSIA1
58 TESTSIA0
59 TESTSOA
60 ADC9
61 ADC8
62 ADC7
63 ADC6
64 ADC5

IC803 BA10324AFV-E2


OUT1 1
-IN1 2
+IN1 3
VCC 4
+IN2 5
-IN2 6
OUT2 7
1
2
3
4
14 OUT4
13 -IN4
12 +IN4
11 GND
10 +IN3
9 -IN3
8 OUT3

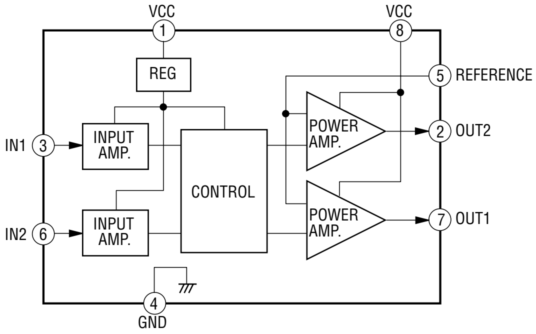
• DISP BOARD

IC1602 NJU3719


PARALLEL DATA OUTPUT BUFFER
LATCH CIRCUIT
SHIFT REGISTER
CONTROL CIRCUIT
P11 1
P12 2
P13 3
P14 4
P15 5
P16 6
P17 7
VSS 8
P18 9
P19 10
P20 11
P21 12
P22 13
P23 14
P24 15
30 VDD
29 P10
28 P9
27 P8
26 P7
25 P6
24 P5
23 P4
22 P3
21 P2
20 P1
19 CLR
18 STB
17 CLK
16 DATA

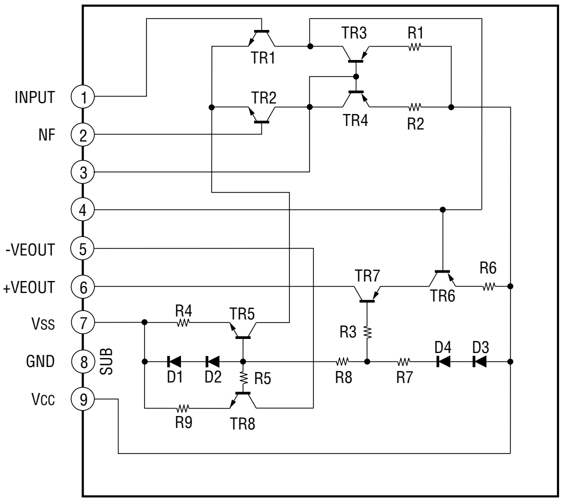
• CLAMP MOTOR BOARD,LOAD MOTOR BOARD

IC701 M54641L


VCC 1
VCC 8
REG
IN1 3
IN2 6
INPUT AMP.
INPUT AMP.
CONTROL
POWER AMP.
POWER AMP.
5 REFERENCE
2 OUT2
7 OUT1
4 GND

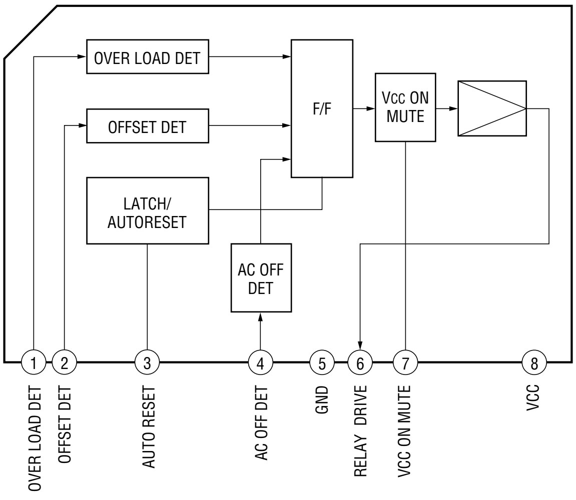
• AMP BOARD

IC1706 STK350-230


INPUT 1
NF 2
3
4
-VEOUT 5
+VEOUT 6
Vss 7
GND 8
Vcc 9
SUB
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
R1
R2
R3
R4
R5
R6
R7
R8
R9
D1
D2
D3
D4

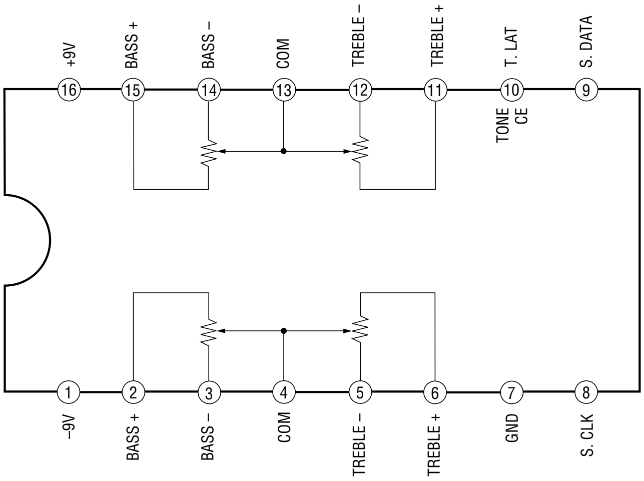
• PS BOARD

IC1802 uPC1237HA


OVER LOAD DET
OFFSET DET
LATCH/ AUTORESET
F/F
Vcc ON MUTE
AC OFF DET
1 OVER LOAD DET
2 OFFSET DET
3 AUTO RESET
4 AC OFF DET
5 GND
6 RELAY DRIVE
7 VCC ON MUTE
8 VCC

• MAIN BOARD

IC1201,IC1203 TC9184AP


+9V
BASS +
BASS –
COM
TREBLE –
TREBLE +
T. LAT
S. DATA
16
15
14
13
12
11
10
9
TONE
CE
1
2
3
4
5
6
7
8
–9V
BASS +
BASS –
COM
TREBLE –
TREBLE +
GND
S. CLK

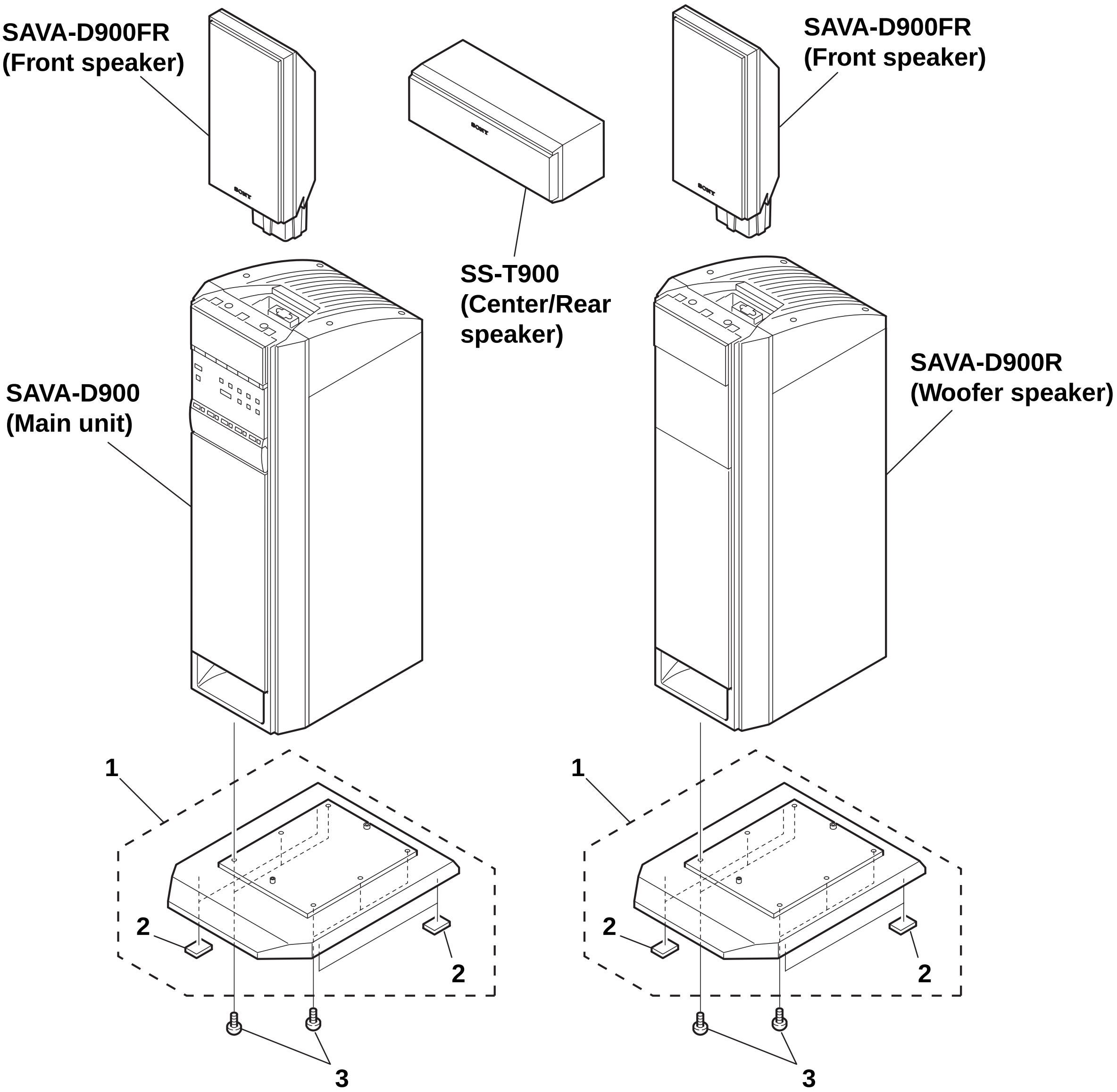
SECTION 6
EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

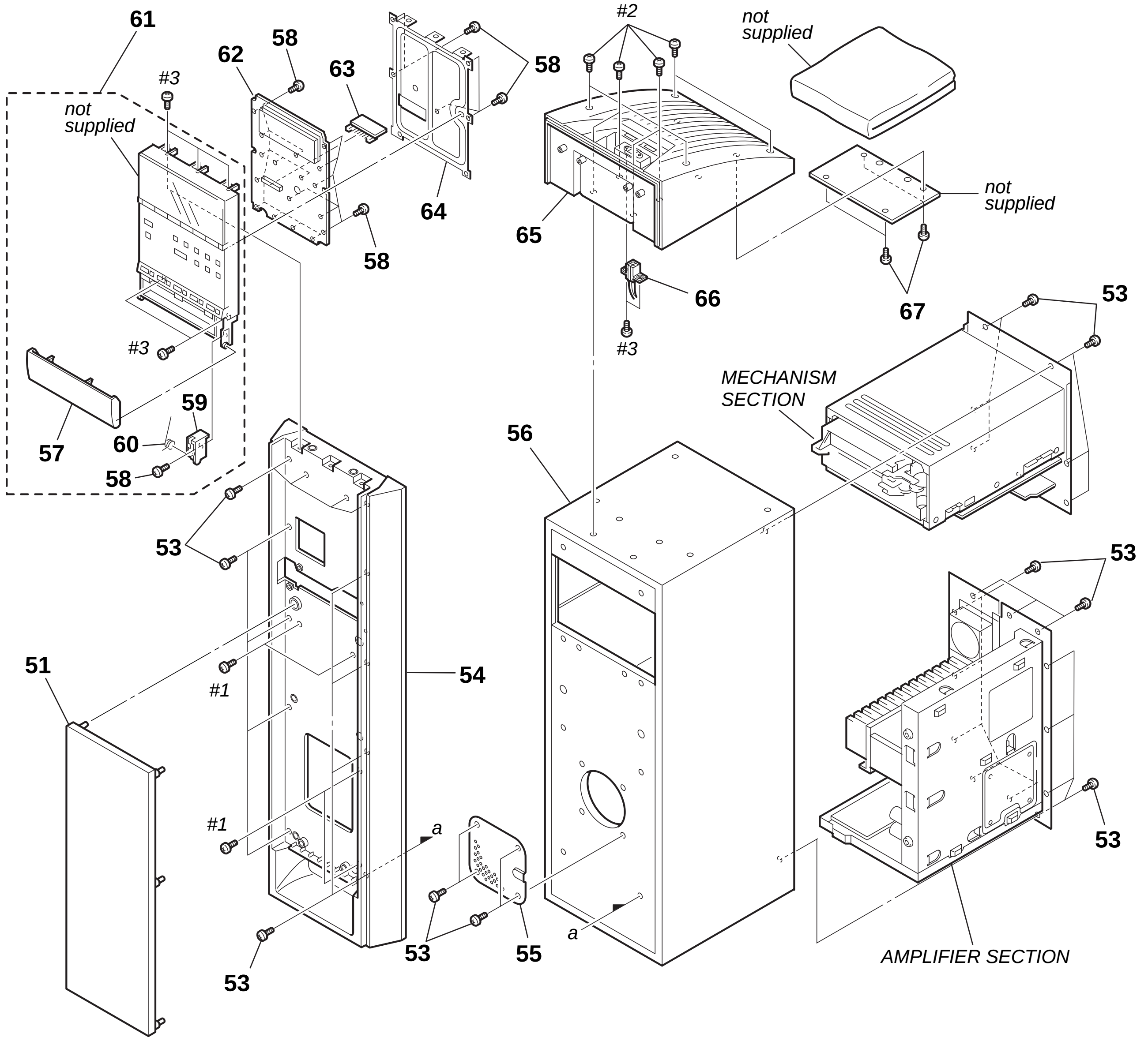
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

6-1. OVERALL SECTION


SAVA-D900FR
(Front speaker)
SS-T900
(Center/Rear speaker)
SAVA-D900FR
(Front speaker)
SAVA-D900
(Main unit)
SAVA-D900R
(Woofer speaker)
1
1
2
2
2
2
3
3

Ref. No.	Part No.	Description	Remarks
1	X-4952-875-1	BASE ASSY	
2	4-967-287-01	CUSHION (A)	
3	4-914-430-11	SCREW(4X20), TAPPING	

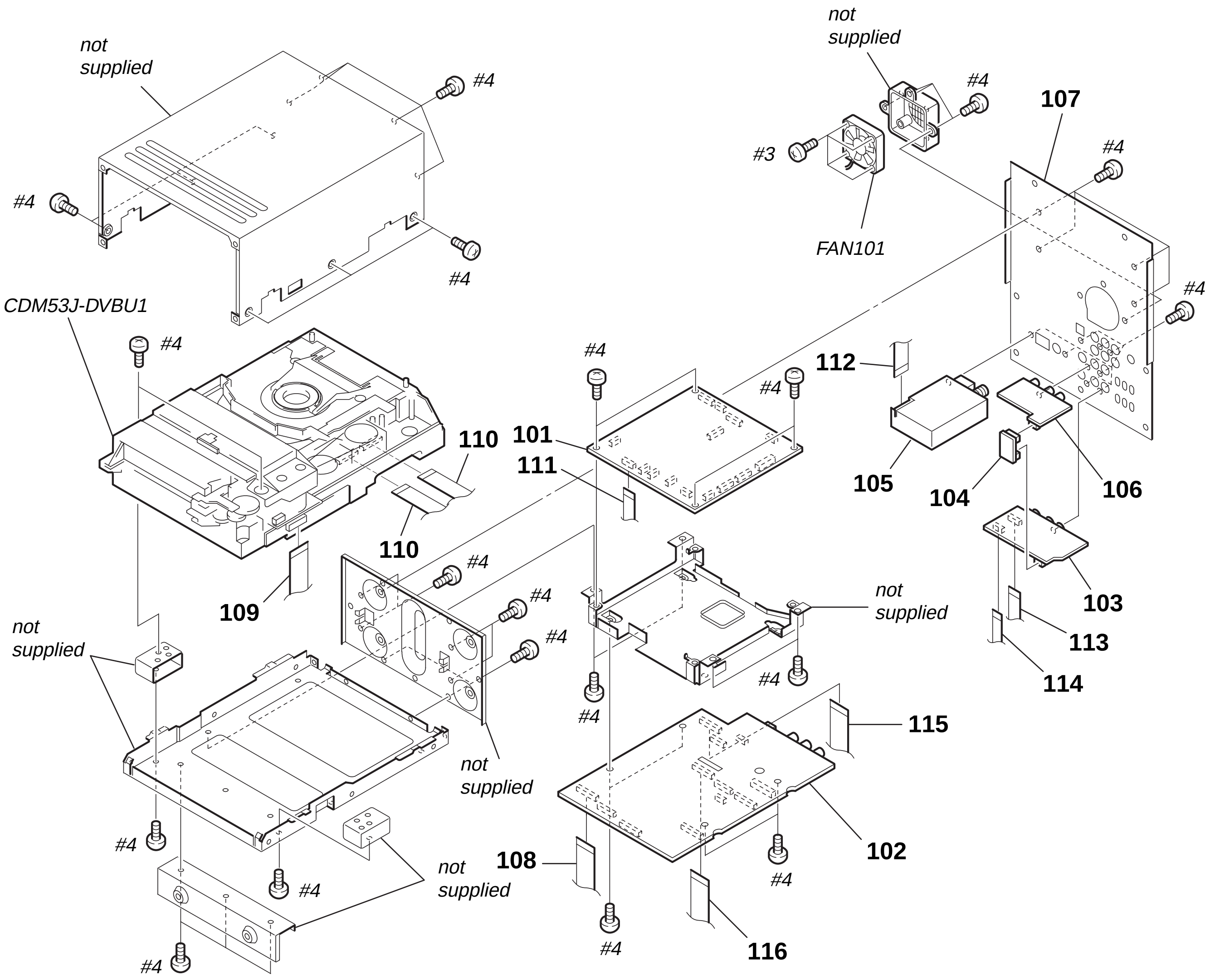
6-2. MAIN UNIT (SAVA-D900) SECTION


61
58
62
63
58
64
58
65
#2
not supplied
not supplied
not supplied
#3
#3
57
59
60
58
66
#3
67
53
MECHANISM SECTION
56
53
53
51
#1
54
#1
a
53
53
55
a
53
AMPLIFIER SECTION

Ref. No.	Part No.	Description	Remarks
51	X-4952-874-1	FRAME (B) ASSY, GRILLE	
53	4-914-430-11	SCREW (4X20), TAPPING	
54	4-228-018-01	PANEL (B),FRONT	
55	4-228-807-01	COVER (BF)	
56	A-4412-181-A	CABINET (L) ASSY, SPEAKER	
57	4-228-045-01	DOOR	
58	4-931-757-31	SCREW(DIA.2.6X8)(IT3B),TAPPING	
59	4-229-875-01	STOPPER, DOOR	
60	4-228-047-01	SPRING, TORSION	
61	X-4952-835-1	PANEL (L) ASSY, DISPLAY	

Ref. No.	Part No.	Description	Remarks
62	A-4473-108-A	DISP BOARD, COMPLETE	
63	A-4473-111-A	FFC BOARD, COMPLETE	
64	4-228-046-01	PLATE, REAR	
65	4-228-017-01	PANEL, TOP	
66	1-792-580-11	CORD(WITH CONNECTOR)	
67	4-986-971-11	SCREW (3.5)	
#1	7-685-887-09	SCREW +BVTT 4X25 (S)	
#2	7-685-661-79	SCREW +P4X12 TYPE2 NON-SLIT	
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	

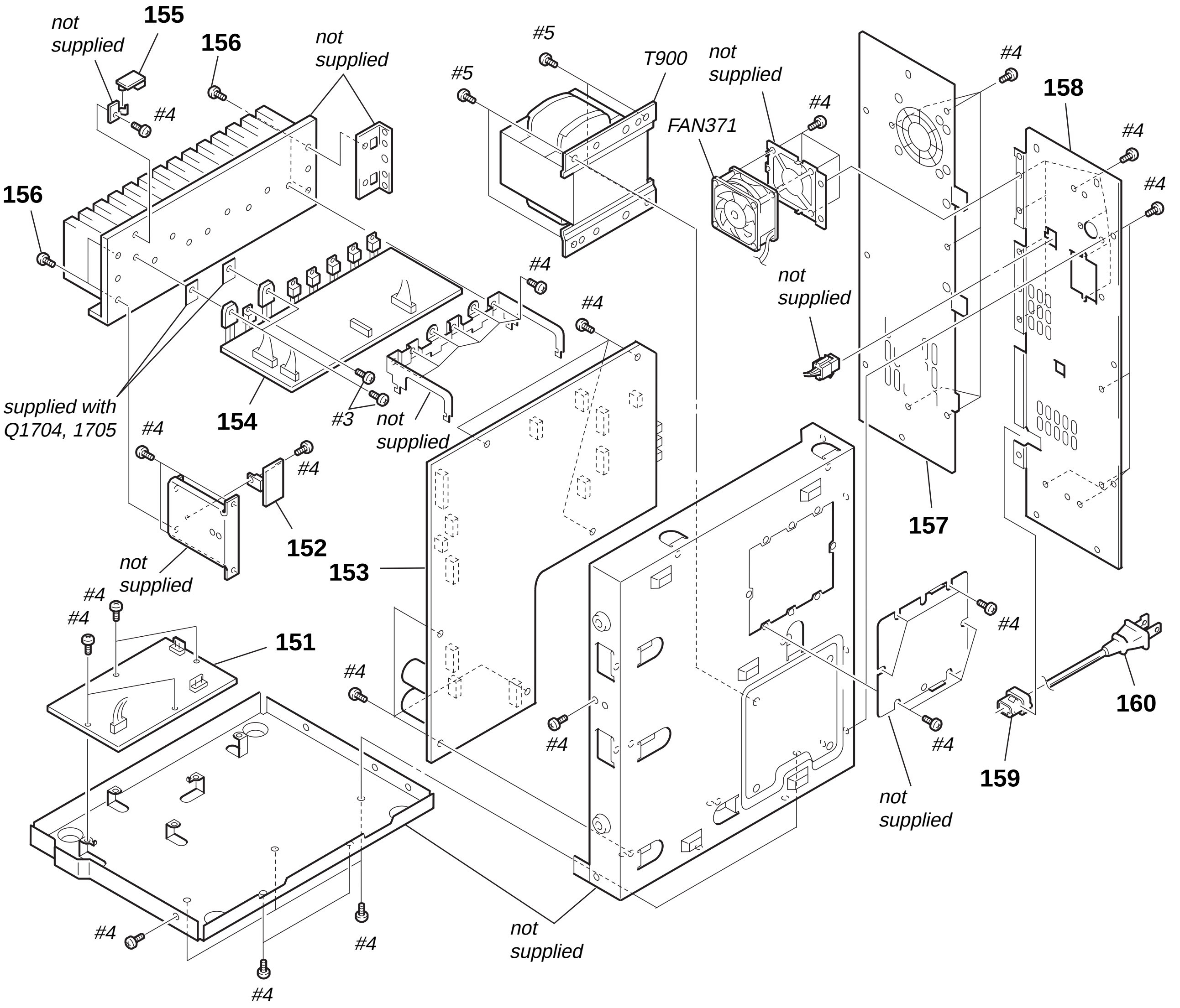
6-3. MAIN CHASSIS SECTION



not supplied
#4
#4
#4
#4
CDM53J-DVBU1
#4
110
101
111
110
109
not supplied
#4
#4
#4
#4
#4
#4
#4
not supplied
not supplied
not supplied
#4
#3
FAN101
#4
107
#4
#4
112
#4
105
104
106
103
not supplied
#4
113
114
115
108
102
#4
#4
116

Ref. No.	Part No.	Description	Remarks
101	A-4473-102-A	DVD BOARD, COMPLETE	
102	A-4473-105-A	MAIN BOARD, COMPLETE	
103	A-4473-110-A	S-VIDEO BOARD, COMPLETE	
104	A-4473-113-A	CONNECT BOARD, COMPLETE	
105	A-4424-428-A	TUNER UNIT	
106	A-4473-109-A	VIDEO BOARD, COMPLETE	
107	4-228-036-01	PANEL (L/C), BACK	
108	1-792-680-11	WIRE (FLAT TYPE)(19 CORE)	
109	1-792-673-11	WIRE (FLAT TYPE)(17 CORE)	
110	1-792-675-11	WIRE (FLAT TYPE)(18 CORE)	
111	1-792-672-11	WIRE (FLAT TYPE)(15 CORE)	
112	1-792-679-11	WIRE (FLAT TYPE)(12 CORE)	
113	1-792-678-11	WIRE (FLAT TYPE)(7 CORE)	
114	1-792-671-11	WIRE (FLAT TYPE)(7 CORE)	
115	1-792-677-11	WIRE (FLAT TYPE)(28 CORE)	
116	1-792-676-11	WIRE (FLAT TYPE)(26 CORE)	
FAN101	1-698-997-11	FAN, D.C. (DVD)	

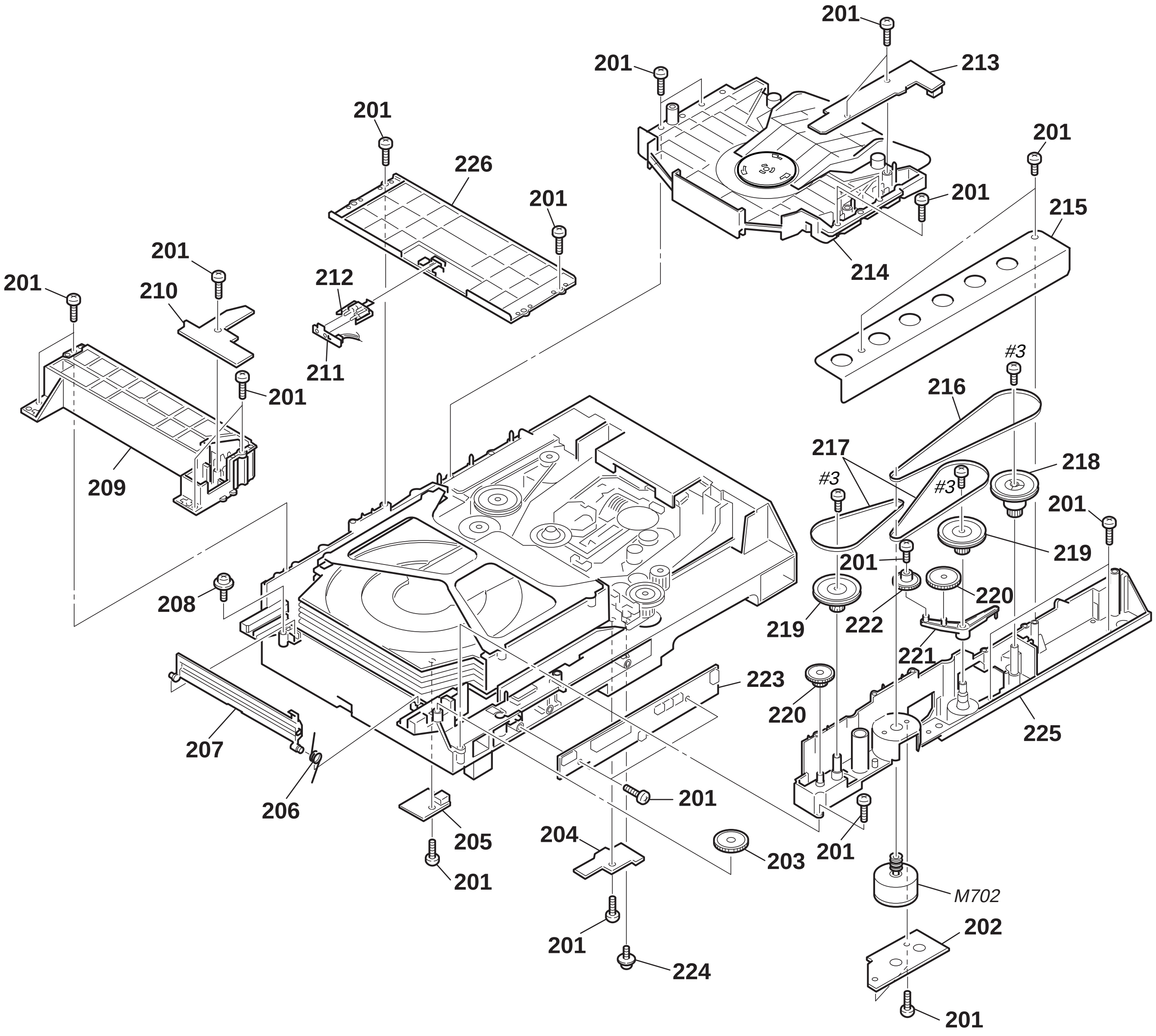
6-4. AMPLIFIER CHASSIS SECTION


not supplied
155
156
not supplied
#5
#5
T900
not supplied
#4
158
#4
FAN371
#4
#4
156
#4
#4
not supplied
supplied with Q1704, 1705
154
#3
not supplied
#4
#4
152
153
157
not supplied
#4
#4
151
#4
#4
#4
#4
160
159
not supplied
#4
#4
not supplied
#4

Ref. No.	Part No.	Description	Remarks
151	A-4473-116-A	STBY BOARD, COMPLETE	
152	A-4473-117-A	REG BOARD, COMPLETE	
153	A-4473-115-A	PS BOARD, COMPLETE	
154	A-4473-106-A	AMP BOARD, COMPLETE	
155	A-4473-114-A	THERMO BOARD, COMPLETE	
156	3-905-609-01	SCREW (TRANSISTOR)	
157	4-228-035-01	PANEL (L/B), BACK	
158	4-228-034-01	PANEL (L/A), BACK	
159	4-217-350-11	STOPPER, CORD	
⚠160	1-783-531-61	CORD, POWER	
FAN371	1-698-792-11	FAN, DC (AMP)	
⚠T900	1-435-480-11	TRANSFORMER, POWER	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-5. MECHANISIM SECTION-1 (CDM53J-DVBU1)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M702
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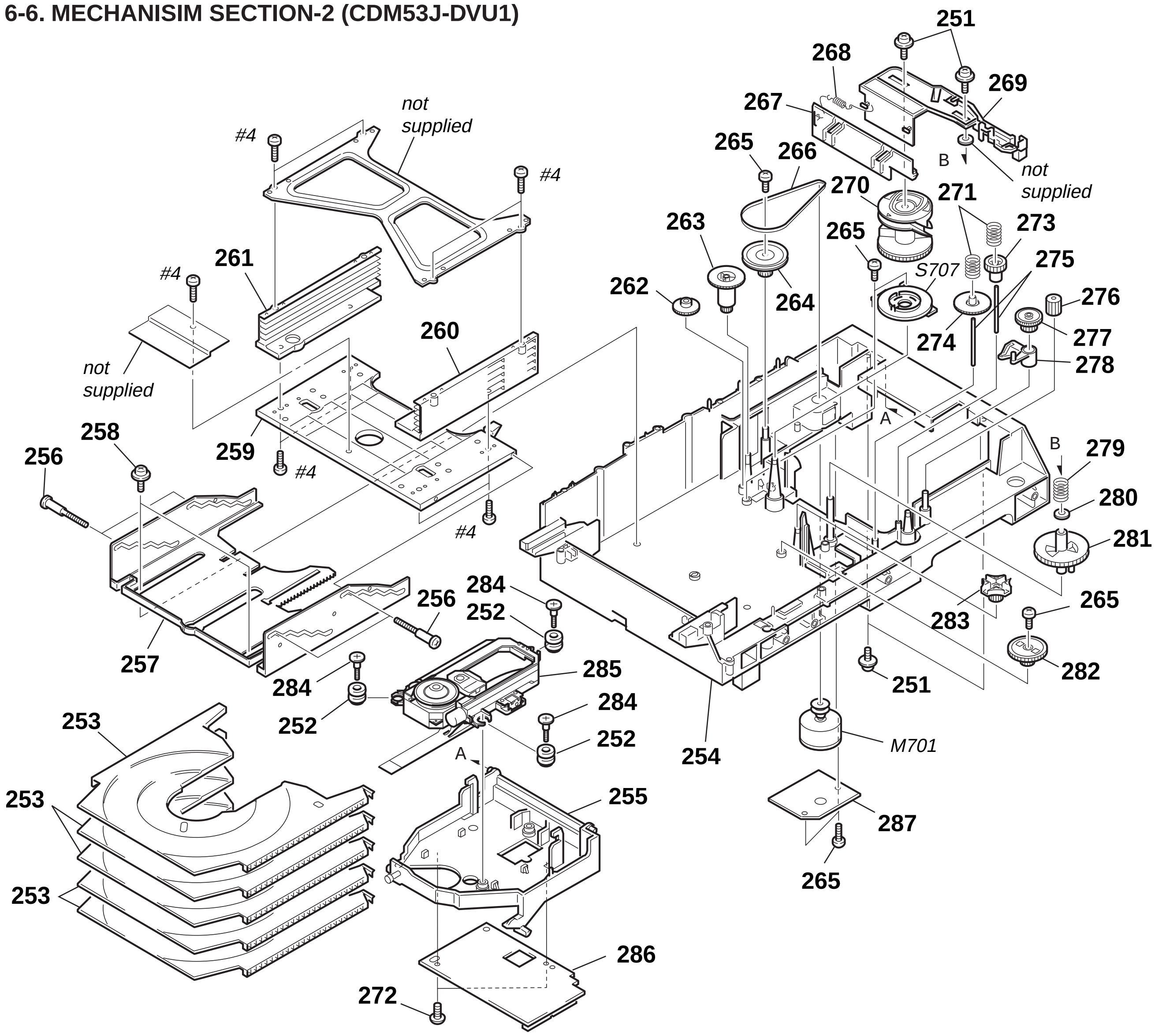
224
201

Ref. No.	Part No.	Description	Remarks
201	4-951-620-41	SCREW (2.6), +BVTP	
202	1-675-728-11	LOAD MOTOR BOARD	
203	4-211-215-01	GEAR (EJECT)	
204	1-675-724-11	INIT/COUNT SW BOARD	
205	1-675-726-11	SENSOR BOARD	
206	4-212-676-01	SPRING (LID), TORSIONOR	
207	4-212-674-11	LID(DISC)	
208	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
209	A-4672-907-A	FITTING BASE (GUIDE) ASSY	
210	1-675-725-11	OUTSW BOARD	
211	1-675-727-11	SENSOR 2 BOARD	
212	4-220-274-01	HOLDER (SENSOR)	
213	1-675-723-11	IN SW BOARD	
214	A-4672-857-A	BASE ASSY, FITTING	
* 215	4-214-129-01	COVER	
216	4-211-235-01	BELT (COMMUNICATION)	
217	4-211-236-01	BELT (LOADING)	
218	4-211-231-01	PULLEY (MODE)	
219	4-211-214-01	PULLEY (LD)	
220	4-211-232-01	GEAR (MODE DECELERATION)	
221	4-211-228-01	LEVER (GOOSENECK)	
222	4-214-130-02	GEAR (TRAY)	
223	1-675-722-11	CONNECTOR BOARD	
224	3-341-549-01	SCREW(2.6X12)(DIA.7.5),+PTP WH	
225	4-211-209-12	CHASSIS (MOLD B)	
226	4-213-579-11	BRACKET (CHASSIS)	
M702	X-4950-342-1	MOTOR (LOADING) ASSY	

6-6. MECHANISIM SECTION-2 (CDM53J-DVU1)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M701
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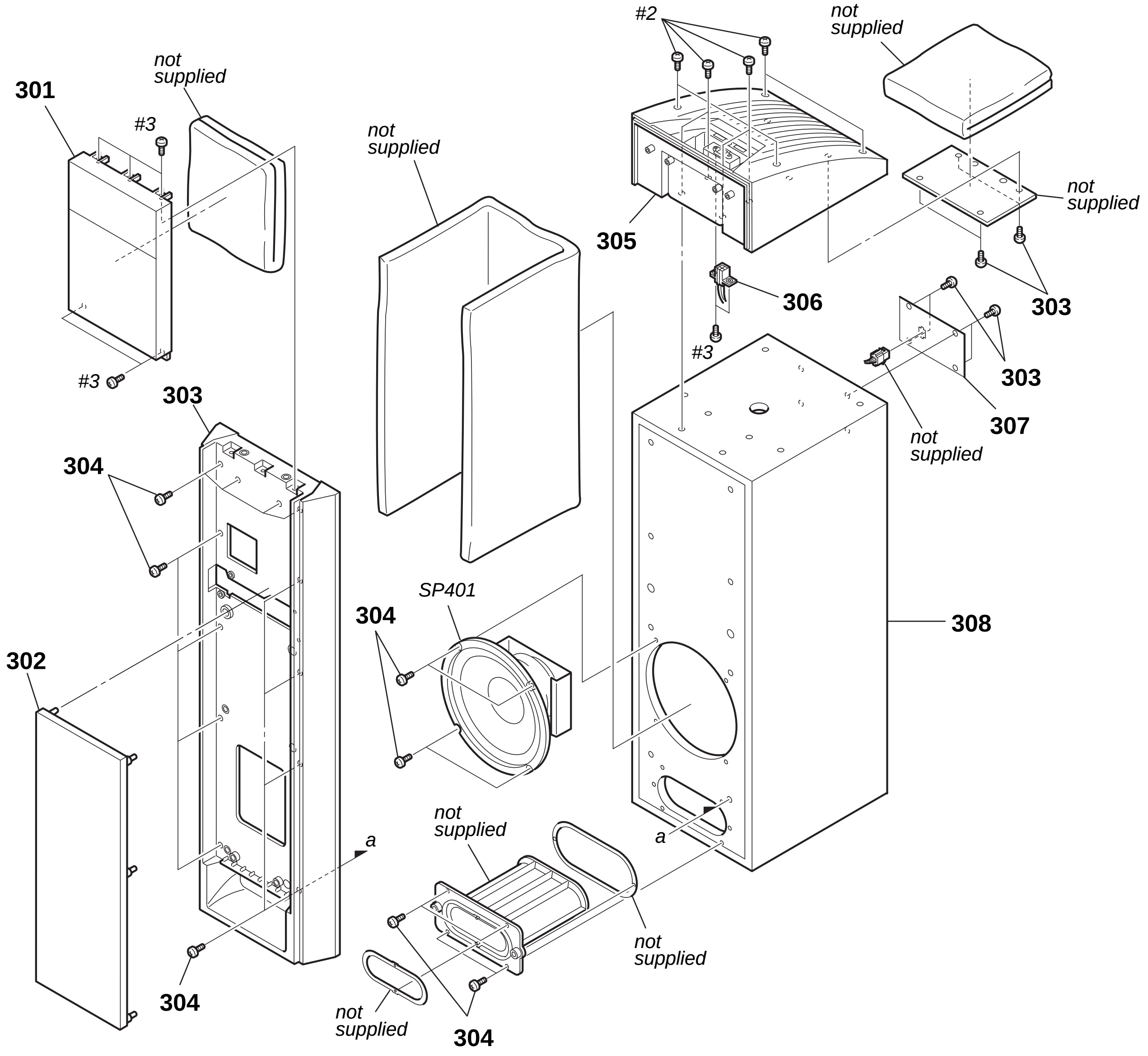
272

Ref. No.	Part No.	Description	Remarks
251	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
252	3-053-847-01	INSULATOR	
253	4-223-291-02	TRAY (DVD)	
254	4-211-208-12	CHASSIS (MOLD)	
255	4-223-292-02	HOLDER (DVD)	
256	4-211-244-01	SCREW, STEP	
257	4-211-223-01	SLIDER (U/D)	
258	4-933-134-01	SCREW (+PTPWH M2.6X6)	
259	4-221-504-01	BASE (STOCKER), FITTING	
260	4-211-211-01	STOCKER (R)	
261	4-211-210-01	STOCKER (L)	
262	4-211-215-01	GEAR (EJECT)	
263	4-211-232-01	GEAR (MODE DECELERATION)	
264	4-211-214-01	PULLEY (LD)	
265	4-951-620-41	SCREW (2.6), +BVTP	
266	4-211-237-01	BELT (MODE)	
267	4-212-677-01	SLIDER (SHUTTER)	
268	4-212-678-01	SPRING (SHUTTER), TENSION	
269	4-211-233-01	SLIDER (SELECTION)	
270	4-211-230-01	GEAR (CHUCKING)	

Ref. No.	Part No.	Description	Remarks
271	4-211-245-01	SPRING, COMPRESSION	
272	4-951-620-41	SCREW (2.6), +BVTP	
273	4-211-221-01	GEAR (LD MOVABLE)	
274	4-211-217-02	GEAR (SELECTION)	
275	4-211-242-01	SHAFT (SELECTION GEAR)	
276	4-211-240-01	GEAR (LD DECELERATION B)	
277	4-211-216-01	GEAR (RELAY)	
278	4-211-241-01	LEVER (SELECTION)	
279	4-216-879-01	SPRING (GEAR A), COMPRESSION	
280	3-701-446-21	WASHER, 8	
281	4-211-218-01	GEAR (GEAR A)	
282	4-211-220-01	GEAR (U/D SLIDER)	
283	4-211-219-01	GEAR (GEAR B)	
284	4-981-923-01	SCREW (M), STEP	
⚠285	8-820-081-09	OPTICAL PICK-UP BLOCK(KHM-220AAA)	
286	A-4724-940-A	TK BOARD, COMPLETE	
287	1-675-729-11	CLAMP MOTOR BOARD	
M701	X-4950-341-1	MOTOR (CLAMP) ASSY	
S707	1-418-045-01	ENCODER, ROTARY	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

6-7. WOOFER SPEAKER (SAVA-D900R) SECTION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SP401
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#2
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305
306
#3
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303
307
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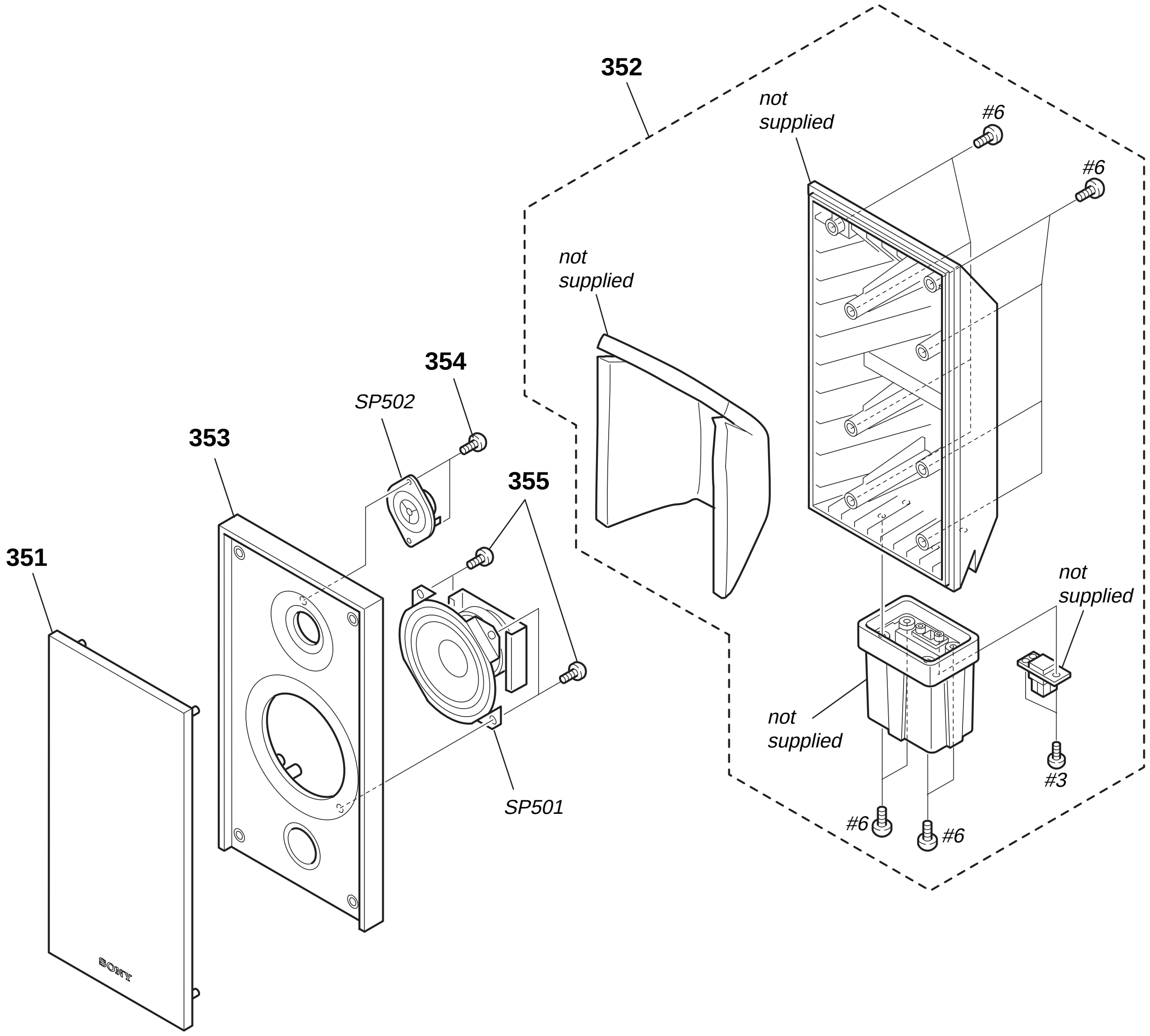
308
a

Ref. No.	Part No.	Description	Remarks
301	X-4952-878-1	PANEL (R) ASSY, DISPLAY	
302	X-4952-874-1	FRAME (B) ASSY, GRILLE	
303	4-228-018-11	PANEL (B),FRONT	
304	4-914-430-11	SCREW (4X20), TAPPING	
305	4-228-017-01	PANEL, TOP	
306	1-792-580-11	CORD (WITH CONNECTOR)	

Ref. No.	Part No.	Description	Remarks
307	4-228-007-01	PANEL (R), BACK	
308	A-4412-182-A	CABINET (R) ASSY, SPEAKER	
SP401	1-529-670-11	SPEAKER (20cm)	
#2	7-685-661-79	SCREW +P4X12 TYPE2 NON-SLIT	
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	

6-8. FRONT SPEAKER (SAVA-D900FR) SECTION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SP502
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355
351
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not supplied
#3
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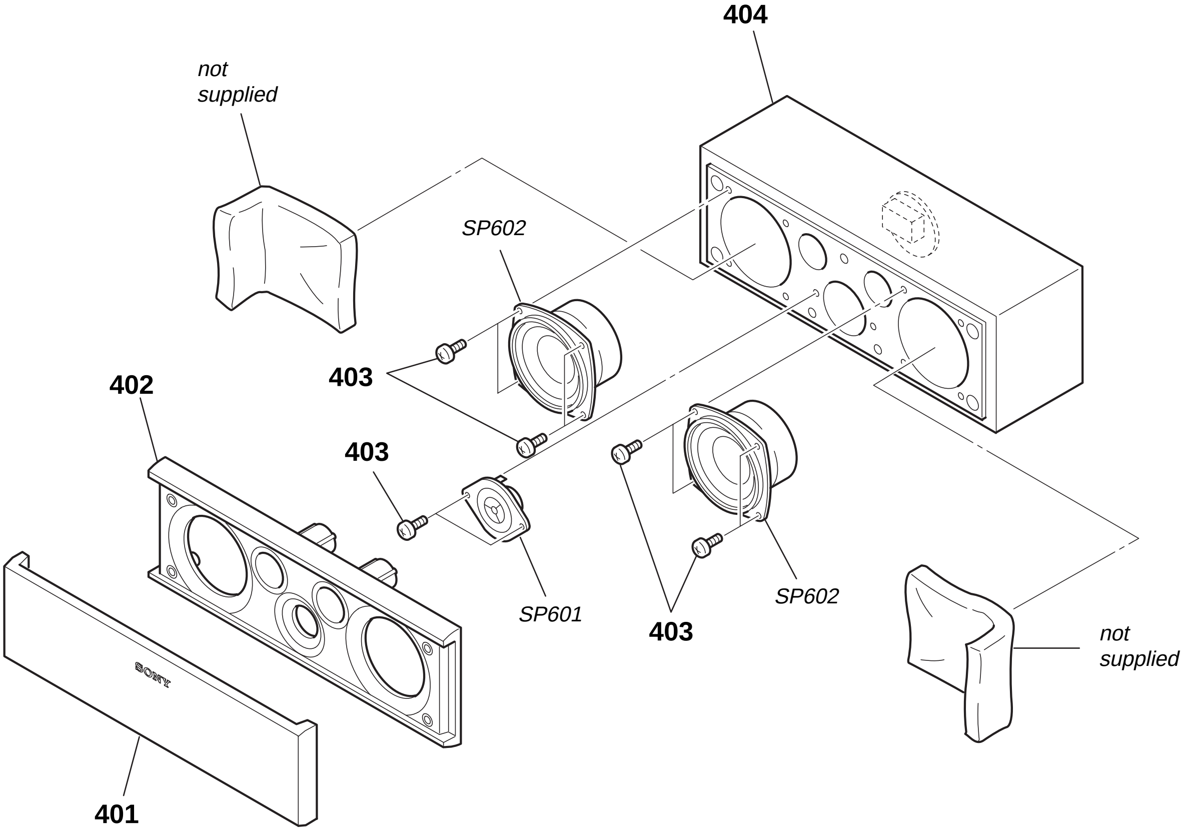
#6
SP501
SONY

Ref. No.	Part No.	Description	Remarks
351	X-4952-877-1	FRAME (A) ASSY, GRILLE	
352	X-4952-895-1	CABINET (A) ASSY, SPEAKER	
353	X-4953-234-1	PANEL (A) ASSY, FRONT	
354	4-986-971-11	SCREW (3.5)	

Ref. No.	Part No.	Description	Remarks
355	4-874-614-21	SCREW (4) (3.5X14), TAPPING	
SP501	1-529-671-11	SPEAKER (10cm)	
SP502	1-529-673-11	SPEAKER (2.5cm)	

6-9. CENTER/ REAR SPEAKER (SS-T900) SECTION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403
SP601
SP602
403
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401
SONY

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
401	X-4952-880-1	FRAME ASSY, GRILLE		404	A-4412-183-A	CABINET ASSY, SPEAKER	
402	X-4953-237-1	PANEL (ST) ASSY, FRONT		SP601	1-529-673-11	SPEAKER (2.5cm)	
403	4-874-614-21	SCREW (4) (3.5X14), TAPPING		SP602	1-529-672-11	SPEAKER (8cm)	

SECTION 7
ELECTRICAL PARTS LIST

AMP

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: μF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA... , uPA... , μPA... ,
  uPB... , μPB... , uPC... , μPC... ,
  uPD..., μPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
	A-4473-106-A	AMP BOARD, COMPLETE ********************			
		< CAPACITOR >			
C1701	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1702	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1703	1-104-664-11	ELECT	47uF	20.00%	25V
C1704	1-163-085-00	CERAMIC CHIP	2PF		50V
C1705	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1706	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1707	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1708	1-104-664-11	ELECT	47uF	20.00%	25V
C1709	1-163-085-00	CERAMIC CHIP	2PF		50V
C1710	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1711	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1712	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1713	1-104-664-11	ELECT	47uF	20.00%	25V
C1714	1-163-085-00	CERAMIC CHIP	2PF		50V
C1715	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1716	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1717	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1718	1-104-664-11	ELECT	47uF	20.00%	25V
C1719	1-163-085-00	CERAMIC CHIP	2PF		50V
C1720	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1721	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1722	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1723	1-104-664-11	ELECT	47uF	20.00%	25V
C1724	1-163-085-00	CERAMIC CHIP	2PF		50V
C1725	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1726	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C1727	1-104-666-11	ELECT	220uF	20.00%	10V
C1728	1-102-989-00	CERAMIC	68PF	5.00%	500V
C1729	1-136-275-11	FILM	390PF	5.00%	630V
C1730	1-163-087-00	CERAMIC CHIP	4PF		50V
C1731	1-128-560-11	ELECT	22uF	20.00%	100V
C1732	1-128-560-11	ELECT	22uF	20.00%	100V
C1733	1-104-664-11	ELECT	47uF	20.00%	25V
C1734	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C1735	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1736	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1737	1-124-903-11	ELECT	1uF	20.00%	50V
C1738	1-124-903-11	ELECT	1uF	20.00%	50V
C1739	1-124-903-11	ELECT	1uF	20.00%	50V
C1740	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C1741	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C1742	1-126-963-11	ELECT	4.7uF	20.00%	50V
C1743	1-126-964-11	ELECT	10uF	20.00%	50V
C1744	1-126-964-11	ELECT	10uF	20.00%	50V
C1745	1-126-964-11	ELECT	10uF	20.00%	50V
C1746	1-126-964-11	ELECT	10uF	20.00%	50V
C1747	1-126-964-11	ELECT	10uF	20.00%	50V
C1748	1-126-964-11	ELECT	10uF	20.00%	50V
C1749	1-126-964-11	ELECT	10uF	20.00%	50V
C1750	1-126-964-11	ELECT	10uF	20.00%	50V
C1751	1-126-964-11	ELECT	10uF	20.00%	50V
C1752	1-126-964-11	ELECT	10uF	20.00%	50V
C1753	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1754	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1755	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1756	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1758	1-124-903-11	ELECT	1uF	20.00%	50V
		< CONNECTOR >			
CN1703	1-691-771-11	PLUG (MICRO CONNECTOR) 9P			
		< DIODE >			
D1701	8-719-991-33	DIODE 1SS133T-77			
D1702	8-719-991-33	DIODE 1SS133T-77			
D1703	8-719-991-33	DIODE 1SS133T-77			
D1704	8-719-991-33	DIODE 1SS133T-77			
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IC1701	8-759-502-31	IC SI-18751			
IC1702	8-759-502-31	IC SI-18751			
IC1703	8-759-502-31	IC SI-18751			
IC1704	8-759-502-31	IC SI-18751			
IC1705	8-759-502-31	IC SI-18751			
IC1706	8-749-011-16	IC STK350-230			
		< TRANSISTOR >			
Q1701	8-729-209-15	TRANSISTOR 2SD2012			
Q1702	8-729-119-79	TRANSISTOR 2SC2785-FEK			
Q1703	8-729-119-77	TRANSISTOR 2SA1175-FEK			
Q1704	8-749-010-25	IC MN2488-OPY-M			
Q1705	8-749-010-26	IC MP1620-OPY-M			
Q1706	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA			
		< RESISTOR >			
R1701	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1702	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1703	1-216-045-00	METAL CHIP	680	5%	1/10W
R1704	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1705	1-249-381-11	CARBON	1	5%	1/4W F
R1706	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1707	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1708	1-216-045-00	METAL CHIP	680	5%	1/10W
R1709	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1710	1-249-381-11	CARBON	1	5%	1/4W F

Ref. No.	Part No.	Description			Remarks
R1711	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1712	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1713	1-216-037-00	METAL CHIP	330	5%	1/10W
R1714	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1715	1-249-381-11	CARBON	1	5%	1/4W F
R1716	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1717	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1718	1-216-043-91	RES-CHIP	560	5%	1/10W
R1719	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1720	1-249-381-11	CARBON	1	5%	1/4W F
R1721	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1722	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1723	1-216-043-91	RES-CHIP	560	5%	1/10W
R1724	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1725	1-249-381-11	CARBON	1	5%	1/4W F
R1726	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1727	1-216-017-91	RES-CHIP	47	5%	1/10W
R1728	1-216-091-00	METAL CHIP	56K	5%	1/10W
R1729	1-216-037-00	METAL CHIP	330	5%	1/10W
R1730	1-216-041-00	METAL CHIP	470	5%	1/10W
R1731	1-216-091-00	METAL CHIP	56K	5%	1/10W
R1732	1-249-405-11	CARBON	100	5%	1/4W F
R1733	1-249-405-11	CARBON	100	5%	1/4W F
R1734	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R1736	1-216-043-91	RES-CHIP	560	5%	1/10W
R1737	1-249-408-11	CARBON	180	5%	1/4W F
R1738	1-249-408-11	CARBON	180	5%	1/4W F
R1739	1-249-393-11	CARBON	10	5%	1/4W F
R1740	1-249-393-11	CARBON	10	5%	1/4W F
R1741	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1742	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1743	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1744	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1745	1-217-151-00	METAL	0.22	10%	2W
R1746	1-217-151-00	METAL	0.22	10%	2W
R1747	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1748	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1749	1-249-393-11	CARBON	10	5%	1/4W F
R1750	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1751	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1752	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1753	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1754	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1755	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1756	1-249-399-11	CARBON	33	5%	1/4W F
R1757	1-216-304-11	METAL CHIP	3.3	5%	1/10W
		< RELAY >			
RY1701	1-515-920-11	RELAY (24V)			
RY1702	1-515-920-11	RELAY (24V)			
RY1703	1-515-920-11	RELAY (24V)			

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Ref. No.	Part No.	Description			Remarks
	1-675-722-11	CONNECTOR BOARD *****************			
		< CONNECTOR >			
CN701	1-770-169-11	CONNECTOR, FFC/FPC 17P			
		< TRANSISTOR >			
Q701	8-729-029-66	TRANSISTOR DTC114ESA			
		< RESISTOR >			
R707	1-249-424-11	CARBON	3.9K	5%	1/4W F
R708	1-249-417-11	CARBON	1K	5%	1/4W F
R709	1-249-429-11	CARBON	10K	5%	1/4W

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Ref. No.	Part No.	Description			Remarks
	1-675-729-11	CLAMP MOTOR BOARD *******************			
		< CAPACITOR >			
C701	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C702	1-126-964-11	ELECT	10uF	20.00%	50V
C706	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C711	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
		< CONNECTOR >			
* CN712	1-568-954-11	PIN, CONNECTOR 5P			
		< DIODE >			
D701	8-719-983-66	DIODE MTZJ-T-72-3.6B			
		< IC >			
IC701	8-759-633-65	IC M54641L			
		< RESISTOR >			
R701	1-249-411-11	CARBON	330	5%	1/4W
R702	1-249-401-11	CARBON	47	5%	1/4W F

****

Ref. No.	Part No.	Description			Remarks
	A-4473-108-A	DISP BOARD, COMPLETE ********************			
	4-228-052-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C1603	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1604	1-126-514-11	ELECT	22uF	20.00%	6.3V
C1605	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1606	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1607	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1608	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1609	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1610	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V
C1611	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C1612	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C1613	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1614	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1615	1-126-382-11	ELECT	100uF	20.00%	6.3V
C1616	1-126-514-11	ELECT	22uF	20.00%	6.3V
C1617	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C1622	1-126-514-11	ELECT	22uF	20.00%	6.3V
C1624	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< CONNECTOR >			
* CN1601	1-770-333-11	HOUSING,CONNECTOR(PC BOARD)20P			

Ref. No.	Part No.	Description			Remarks
		< DIODE >			
D1605	8-719-032-86	DIODE SEL5420E (DVD)			
D1606	8-719-032-86	DIODE SEL5420E (TUNER)			
D1607	8-719-032-86	DIODE SEL5420E (TV)			
D1608	8-719-032-86	DIODE SEL5420E (VIDEO)			
D1609	8-719-032-86	DIODE SEL5420E (AUX)			
D1610	8-719-070-83	DIODE SELU5E20C-TP15			
D1611	8-719-056-12	DIODE SML79420C-TP4 (DISC 1)			
D1612	8-719-056-12	DIODE SML79420C-TP4 (DISC 2)			
D1613	8-719-056-12	DIODE SML79420C-TP4 (DISC 3)			
D1614	8-719-056-12	DIODE SML79420C-TP4 (DISC 4)			
D1615	8-719-056-12	DIODE SML79420C-TP4 (DISC 5)			
		< FERRITE BEAD >			
FB1601	1-414-813-11	FERRITE	0UH		
FB1602	1-414-813-11	FERRITE	0UH		
FB1603	1-414-813-11	FERRITE	0UH		
FB1604	1-414-813-11	FERRITE	0UH		
FB1605	1-414-813-11	FERRITE	0UH		
		< FILTER >			
FL1601	1-517-963-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC1601	8-759-596-83	IC MSM9202-05			
IC1602	8-759-373-50	IC NJU3719			
IC1603	8-759-459-86	IC NJL64H400A			
		< TRANSISTOR >			
Q1603	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1604	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1615	8-729-901-00	TRANSISTOR DTC124EK			
		< RESISTOR >			
R1513	1-216-025-91	RES-CHIP	100	5%	1/10W
R1514	1-216-025-91	RES-CHIP	100	5%	1/10W
R1515	1-216-025-91	RES-CHIP	100	5%	1/10W
R1615	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1616	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1617	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R1618	1-216-025-91	RES-CHIP	100	5%	1/10W
R1619	1-216-025-91	RES-CHIP	100	5%	1/10W
R1620	1-216-025-91	RES-CHIP	100	5%	1/10W
R1621	1-216-025-91	RES-CHIP	100	5%	1/10W
R1622	1-216-025-91	RES-CHIP	100	5%	1/10W
R1623	1-216-025-91	RES-CHIP	100	5%	1/10W
R1624	1-216-025-91	RES-CHIP	100	5%	1/10W
R1625	1-216-025-91	RES-CHIP	100	5%	1/10W
R1626	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1627	1-216-029-00	METAL CHIP	150	5%	1/10W
R1628	1-216-029-00	METAL CHIP	150	5%	1/10W
R1629	1-216-029-00	METAL CHIP	150	5%	1/10W
R1630	1-216-029-00	METAL CHIP	150	5%	1/10W
R1631	1-216-029-00	METAL CHIP	150	5%	1/10W
R1632	1-216-037-00	METAL CHIP	330	5%	1/10W
R1634	1-216-029-00	METAL CHIP	150	5%	1/10W
R1635	1-216-029-00	METAL CHIP	150	5%	1/10W
R1636	1-216-029-00	METAL CHIP	150	5%	1/10W
R1637	1-216-029-00	METAL CHIP	150	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R1638	1-216-029-00	METAL CHIP	150	5%	1/10W
R1639	1-216-029-00	METAL CHIP	150	5%	1/10W
R1640	1-216-029-00	METAL CHIP	150	5%	1/10W
R1641	1-216-029-00	METAL CHIP	150	5%	1/10W
R1642	1-216-029-00	METAL CHIP	150	5%	1/10W
R1643	1-216-029-00	METAL CHIP	150	5%	1/10W
R1645	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1646	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1647	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R1648	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R1649	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R1650	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1651	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R1652	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1653	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1655	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1656	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1657	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R1658	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R1659	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R1670	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R1671	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1675	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1676	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1677	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R1678	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R1679	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R1680	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1681	1-216-017-91	RES-CHIP	47	5%	1/10W
R1682	1-216-017-91	RES-CHIP	47	5%	1/10W
		< SWITCH >			
S1601	1-571-760-11	SWITCH, KEY BOARD (⏏)			
S1602	1-571-760-11	SWITCH, KEY BOARD (DISC 5)			
S1603	1-571-760-11	SWITCH, KEY BOARD (⏏)			
S1604	1-571-760-11	SWITCH, KEY BOARD (DISC 4)			
S1605	1-571-760-11	SWITCH, KEY BOARD (⏏)			
S1606	1-571-760-11	SWITCH, KEY BOARD (DISC 3)			
S1607	1-571-760-11	SWITCH, KEY BOARD (⏏)			
S1608	1-571-760-11	SWITCH, KEY BOARD (DISC 2)			
S1609	1-571-760-11	SWITCH, KEY BOARD (⏏)			
S1610	1-571-760-11	SWITCH, KEY BOARD (DISC 1)			
S1613	1-571-760-11	SWITCH, KEY BOARD (PRESET TUNING +)			
S1614	1-571-760-11	SWITCH, KEY BOARD (PRESET TUNING -)			
S1615	1-571-760-11	SWITCH, KEY BOARD (MASTER VOLUME +)			
S1616	1-571-760-11	SWITCH, KEY BOARD (MASTER VOLUME -)			
S1617	1-571-760-11	SWITCH, KEY BOARD (SOUND FIELD >)			
S1618	1-571-760-11	SWITCH, KEY BOARD (SOUND FIELD <)			
S1619	1-571-760-11	SWITCH, KEY BOARD (SUBWOOFER MODE)			
S1620	1-571-760-11	SWITCH, KEY BOARD (FUNCTION)			
S1621	1-571-760-11	SWITCH, KEY BOARD (BAND)			
S1622	1-571-760-11	SWITCH, KEY BOARD (■)			
S1623	1-571-760-11	SWITCH, KEY BOARD (❚❚)			
S1624	1-571-760-11	SWITCH, KEY BOARD (▷)			
S1625	1-571-760-11	SWITCH, KEY BOARD (▷▷❙)			
S1626	1-571-760-11	SWITCH, KEY BOARD (❙◁◁)			
S1627	1-571-760-11	SWITCH, KEY BOARD (I/⏻)			

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Ref. No.	Part No.	Description			Remarks
	A-4473-102-A	DVD BOARD, COMPLETE			
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		< CAPACITOR >			
C001	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C002	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C003	1-126-246-11	ELECT CHIP	220uF	20%	4V
C004	1-126-204-11	ELECT CHIP	47uF	20%	16V
C005	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C007	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C008	1-126-204-11	ELECT CHIP	47uF	20%	16V
C009	1-126-204-11	ELECT CHIP	47uF	20%	16V
C010	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C011	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C012	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C013	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C014	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C015	1-126-246-11	ELECT CHIP	220uF	20%	4V
C016	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C017	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C018	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C019	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C020	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C021	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C022	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C023	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C025	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C201	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C202	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C203	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C204	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C206	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C211	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C304	1-110-563-11	CERAMIC CHIP	0.068uF	10.00%	16V
C307	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C309	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C310	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C314	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C315	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C316	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C319	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C321	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C322	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C323	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C324	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C325	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C327	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C328	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C329	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C331	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C333	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C334	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C337	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C338	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C339	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C341	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C343	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C344	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C401	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C402	1-126-209-11	ELECT CHIP	100uF	20.00%	4V
C403	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C404	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C405	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C406	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C408	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C410	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C411	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C413	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C414	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C416	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C418	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C420	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C422	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C425	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C426	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C428	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C431	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C432	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C433	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C434	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C436	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C438	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C439	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C440	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C441	1-126-209-11	ELECT CHIP	100uF	20.00%	4V
C443	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C501	1-126-400-11	ELECT	22uF	20%	35V
C502	1-126-400-11	ELECT	22uF	20%	35V
C503	1-126-400-11	ELECT	22uF	20%	35V
C504	1-126-400-11	ELECT	22uF	20%	35V
C505	1-126-400-11	ELECT	22uF	20%	35V
C506	1-126-400-11	ELECT	22uF	20%	35V
C507	1-164-672-11	CERAMIC CHIP	1500PF	5.00%	16V
C508	1-164-672-11	CERAMIC CHIP	1500PF	5.00%	16V
C509	1-126-204-11	ELECT CHIP	47uF	20%	16V
C510	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C511	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C514	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C517	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C518	1-126-204-11	ELECT CHIP	47uF	20%	16V
C519	1-126-204-11	ELECT CHIP	47uF	20%	16V
C526	1-124-779-00	ELECT CHIP	10uF	20%	16V
C527	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C601	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C602	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C603	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C604	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C605	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C606	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remarks
C607	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C608	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C702	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C703	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C704	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C705	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C706	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C707	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C708	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C709	1-115-467-11	CERAMIC CHIP	0.22uF	10.00%	10V
C710	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C711	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C712	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C713	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C714	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C715	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C717	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C801	1-126-204-11	ELECT CHIP	47uF	20%	16V
C802	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C803	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C805	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C806	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C807	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C808	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C809	1-110-563-11	CERAMIC CHIP	0.068uF	10.00%	16V
C810	1-110-563-11	CERAMIC CHIP	0.068uF	10.00%	16V
C811	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C812	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C813	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C814	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C815	1-110-666-11	ELECT CHIP	22uF	20.00%	6.3V
C818	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C819	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C820	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C821	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C822	1-126-204-11	ELECT CHIP	47uF	20%	16V
C823	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C824	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C825	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C830	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C831	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C832	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C833	1-164-677-11	CERAMIC CHIP	0.033uF	10.00%	16V
C834	1-164-677-11	CERAMIC CHIP	0.033uF	10.00%	16V
C835	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C836	1-115-467-11	CERAMIC CHIP	0.22uF	10.00%	10V
C837	1-115-467-11	CERAMIC CHIP	0.22uF	10.00%	10V
C901	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C902	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C903	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C904	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C905	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C906	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C907	1-107-823-11	CERAMIC CHIP	0.47uF	10.00%	16V
C909	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C910	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C911	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C912	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C913	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C914	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C915	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C916	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C917	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C918	1-128-390-11	ELECT CHIP	220uF	20.00%	6.3V
C919	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C920	1-126-209-11	ELECT CHIP	100uF	20.00%	4V
C921	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C922	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C923	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C924	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C925	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C926	1-162-924-11	CERAMIC CHIP	56PF	5.00%	50V
C927	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C928	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C929	1-126-209-11	ELECT CHIP	100uF	20.00%	4V
C930	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C931	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C932	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C933	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C934	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C935	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C936	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C937	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C938	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C939	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C940	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C941	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C942	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C943	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C944	1-128-390-11	ELECT CHIP	220uF	20.00%	6.3V
C945	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C946	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C947	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C948	1-124-779-00	ELECT CHIP	10uF	20%	16V
C949	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C950	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C951	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C952	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C953	1-104-905-11	CAPACITOR	0.22F		5.5V
C954	1-104-851-11	TANTAL. CHIP	10uF	20.00%	10V
C955	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN001	1-794-032-21	PIN, CONNECTOR			
CN002	1-784-377-31	CONNECTOR, FFC/FPC 18P			
CN003	1-784-377-31	CONNECTOR, FFC/FPC 18P			
CN005	1-784-366-31	CONNECTOR, FFC/FPC 7P			
CN006	1-770-305-11	CONNECTOR, FFC/FPC 10P			
CN009	1-784-376-31	CONNECTOR, FFC/FPC 17P			
* CN010	1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD)5P			
* CN012	1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD)5P			
* CN013	1-569-775-21	PIN, CONNECTOR (SMD) 5P			
CN014	1-770-305-11	CONNECTOR, FFC/FPC 10P			
CN015	1-784-374-31	CONNECTOR, FFC/FPC 15P			
CN016	1-770-305-11	CONNECTOR, FFC/FPC 10P			
CN017	1-794-341-21	CONNECTOR, FFC/FPC 27P			
CN019	1-784-383-31	CONNECTOR, FFC/FPC 26P			

Ref. No.	Part No.	Description	Remarks
		< DIODE >	
D701	8-719-073-01	DIODE MA111-(K8).S0	
D801	8-719-059-50	DIODE MA3J142D0LSO	
D802	8-719-073-01	DIODE MA111-(K8).S0	
D803	8-719-059-50	DIODE MA3J142D0LSO	
D804	8-719-059-51	DIODE MA3J142E0LSO	
D805	8-719-059-51	DIODE MA3J142E0LSO	
D806	8-719-073-01	DIODE MA111-(K8).S0	
D807	8-719-073-01	DIODE MA111-(K8).S0	
D901	8-719-053-18	DIODE 1SR154-400TE-25	
D902	8-719-053-18	DIODE 1SR154-400TE-25	
D903	8-719-073-01	DIODE MA111-(K8).S0	
D904	8-719-073-01	DIODE MA111-(K8).S0	
D905	8-719-073-01	DIODE MA111-(K8).S0	
D906	8-719-073-01	DIODE MA111-(K8).S0	
D907	8-719-073-01	DIODE MA111-(K8).S0	
D908	8-719-073-01	DIODE MA111-(K8).S0	
D909	8-719-073-01	DIODE MA111-(K8).S0	
D910	8-719-073-01	DIODE MA111-(K8).S0	
D911	8-719-059-50	DIODE MA3J142D0LSO	
D912	8-719-059-50	DIODE MA3J142D0LSO	
D913	8-719-059-50	DIODE MA3J142D0LSO	
D914	8-719-059-50	DIODE MA3J142D0LSO	
		< FERRITE BEAD >	
FB001	1-469-760-21	INDUCTOR 0UH	
FB002	1-469-760-21	INDUCTOR 0UH	
FB003	1-469-760-21	INDUCTOR 0UH	
FB004	1-469-760-21	INDUCTOR 0UH	
FB005	1-469-760-21	INDUCTOR 0UH	
FB006	1-469-760-21	INDUCTOR 0UH	
FB007	1-469-760-21	INDUCTOR 0UH	
FB008	1-469-760-21	INDUCTOR 0UH	
FB014	1-469-681-21	INDUCTOR 0UH	
FB015	1-469-681-21	INDUCTOR 0UH	
FB016	1-216-801-11	METAL CHIP 22 5%	1/16W
FB017	1-469-681-21	INDUCTOR 0UH	
FB018	1-469-681-21	INDUCTOR 0UH	
FB019	1-469-760-21	INDUCTOR 0UH	
FB020	1-469-760-21	INDUCTOR 0UH	
FB021	1-469-760-21	INDUCTOR 0UH	
FB022	1-469-760-21	INDUCTOR 0UH	
FB023	1-500-283-11	INDUCTOR CHIP 0UH	
FB024	1-469-760-21	INDUCTOR 0UH	
FB025	1-469-760-21	INDUCTOR 0UH	
FB026	1-469-760-21	INDUCTOR 0UH	
FB027	1-469-760-21	INDUCTOR 0UH	
FB031	1-469-760-21	INDUCTOR 0UH	
FB055	1-500-283-11	INDUCTOR CHIP 0UH	
FB056	1-500-283-11	INDUCTOR CHIP 0UH	
FB058	1-500-283-11	INDUCTOR CHIP 0UH	
FB060	1-500-283-11	INDUCTOR CHIP 0UH	
FB081	1-216-801-11	METAL CHIP 22 5%	1/16W
FB083	1-216-801-11	METAL CHIP 22 5%	1/16W
FB084	1-216-801-11	METAL CHIP 22 5%	1/16W
FB085	1-216-801-11	METAL CHIP 22 5%	1/16W
FB087	1-216-801-11	METAL CHIP 22 5%	1/16W
FB105	1-469-760-21	INDUCTOR 0UH	
FB106	1-469-760-21	INDUCTOR 0UH	
FB901	1-469-760-21	INDUCTOR 0UH	
FB902	1-469-681-21	INDUCTOR 0UH	
FB903	1-469-681-21	INDUCTOR 0UH	
FB904	1-469-681-21	INDUCTOR 0UH	
FB905	1-469-681-21	INDUCTOR 0UH	
FB906	1-469-681-21	INDUCTOR 0UH	
FB907	1-469-681-21	INDUCTOR 0UH	
FB908	1-469-681-21	INDUCTOR 0UH	
FB909	1-469-681-21	INDUCTOR 0UH	
FB910	1-469-681-21	INDUCTOR 0UH	
FB911	1-469-681-21	INDUCTOR 0UH	
FB913	1-469-681-21	INDUCTOR 0UH	
FB914	1-469-681-21	INDUCTOR 0UH	
FB916	1-500-283-11	INDUCTOR CHIP 0UH	
FB917	1-500-283-11	INDUCTOR CHIP 0UH	
FB919	1-469-681-21	INDUCTOR 0UH	
FB920	1-469-681-21	INDUCTOR 0UH	
FB921	1-469-681-21	INDUCTOR 0UH	
FB922	1-469-681-21	INDUCTOR 0UH	
FB923	1-469-681-21	INDUCTOR 0UH	
FB924	1-469-681-21	INDUCTOR 0UH	
FB925	1-469-681-21	INDUCTOR 0UH	
FB926	1-469-681-21	INDUCTOR 0UH	
FB927	1-469-681-21	INDUCTOR 0UH	
FB928	1-469-681-21	INDUCTOR 0UH	
FB929	1-469-681-21	INDUCTOR 0UH	
FB930	1-469-681-21	INDUCTOR 0UH	
FB931	1-469-681-21	INDUCTOR 0UH	
FB932	1-469-681-21	INDUCTOR 0UH	
FB935	1-469-681-21	INDUCTOR 0UH	
FB936	1-469-681-21	INDUCTOR 0UH	
FB939	1-469-681-21	INDUCTOR 0UH	
FB940	1-469-681-21	INDUCTOR 0UH	
FB947	1-469-681-21	INDUCTOR 0UH	
FB948	1-469-681-21	INDUCTOR 0UH	
FB949	1-469-681-21	INDUCTOR 0UH	
FB950	1-469-681-21	INDUCTOR 0UH	
FB951	1-469-681-21	INDUCTOR 0UH	
FB952	1-469-681-21	INDUCTOR 0UH	
FB953	1-469-681-21	INDUCTOR 0UH	
FB954	1-469-681-21	INDUCTOR 0UH	
FB955	1-469-681-21	INDUCTOR 0UH	
FB956	1-469-760-21	INDUCTOR 0UH	
FB957	1-469-681-21	INDUCTOR 0UH	
FB958	1-469-681-21	INDUCTOR 0UH	
FB959	1-469-681-21	INDUCTOR 0UH	
FB960	1-469-681-21	INDUCTOR 0UH	
FB961	1-469-681-21	INDUCTOR 0UH	
FB962	1-469-681-21	INDUCTOR 0UH	
FB963	1-469-681-21	INDUCTOR 0UH	
FB964	1-469-681-21	INDUCTOR 0UH	

Ref. No.	Part No.	Description	Remarks
FB965	1-469-681-21	INDUCTOR 0UH	
FB966	1-469-681-21	INDUCTOR 0UH	
FB967	1-469-760-21	INDUCTOR 0UH	
FB968	1-469-681-21	INDUCTOR 0UH	
FB969	1-469-760-21	INDUCTOR 0UH	
		< FILTER >	
FL001	1-234-177-21	FILTER, CHIP EMI	
FL002	1-234-177-21	FILTER, CHIP EMI	
FL003	1-233-893-21	FILTER, CHIP EMI	
FL004	1-233-893-21	FILTER, CHIP EMI	
FL005	1-234-177-21	FILTER, CHIP EMI	
FL006	1-234-177-21	FILTER, CHIP EMI	
FL007	1-233-893-21	FILTER, CHIP EMI	
FL008	1-234-177-21	FILTER, CHIP EMI	
FL009	1-234-177-21	FILTER, CHIP EMI	
FL010	1-234-177-21	FILTER, CHIP EMI	
FL011	1-234-177-21	FILTER, CHIP EMI	
FL012	1-233-893-21	FILTER, CHIP EMI	
FL013	1-233-893-21	FILTER, CHIP EMI	
FL014	1-234-177-21	FILTER, CHIP EMI	
FL015	1-234-177-21	FILTER, CHIP EMI	
FL016	1-234-177-21	FILTER, CHIP EMI	
FL017	1-234-177-21	FILTER, CHIP EMI	
FL202	1-234-177-21	FILTER, CHIP EMI	
FL203	1-234-177-21	FILTER, CHIP EMI	
FL204	1-234-177-21	FILTER, CHIP EMI	
FL205	1-234-177-21	FILTER, CHIP EMI	
FL301	1-234-177-21	FILTER, CHIP EMI	
FL302	1-234-177-21	FILTER, CHIP EMI	
FL303	1-234-177-21	FILTER, CHIP EMI	
FL401	1-234-177-21	FILTER, CHIP EMI	
FL402	1-234-177-21	FILTER, CHIP EMI	
FL403	1-234-177-21	FILTER, CHIP EMI	
FL404	1-234-177-21	FILTER, CHIP EMI	
FL405	1-234-177-21	FILTER, CHIP EMI	
FL601	1-234-177-21	FILTER, CHIP EMI	
FL602	1-234-177-21	FILTER, CHIP EMI	
FL701	1-234-177-21	FILTER, CHIP EMI	
FL901	1-234-177-21	FILTER, CHIP EMI	
FL902	1-234-177-21	FILTER, CHIP EMI	
FL903	1-234-177-21	FILTER, CHIP EMI	
FL904	1-234-177-21	FILTER, CHIP EMI	
FL905	1-234-177-21	FILTER, CHIP EMI	
		< IC >	
IC001	8-759-567-31	IC PLL1700E/2K	
IC002	8-759-052-52	IC L78M05T-FA	
IC004	8-759-531-92	IC TC7WH04FU(TE12R)	
IC005	8-759-486-55	IC NJM2370U33-TE2	
IC201	8-759-362-00	IC BR9040F-E2	
IC202	8-759-599-39	IC MB91101APFV-G-BND	
IC203	8-759-645-76	IC TC74VHCT32AFT	
IC204	8-759-573-65	IC IDT71V016S20PHAU-TL	
IC205	8-759-683-97	IC MR27V1602D-E5MAZ060	
IC207	8-759-427-92	IC PST9126NL	
IC302	8-759-486-55	IC NJM2370U33-TE2	
IC303	8-759-567-27	IC CXD8784R	
IC304	8-759-583-44	IC MSM51V18160D-60TSKR1	
IC401	8-752-398-60	IC CXD1930BQ	
IC402	8-759-573-19	IC MSM56V16160D-10TS-K	
IC403	8-759-573-19	IC MSM56V16160D-10TS-K	
IC404	8-759-486-55	IC NJM2370U33-TE2	
IC501	8-759-052-52	IC L78M05T-FA	
IC502	8-759-106-02	IC uPC4570G2	
IC503	8-759-106-02	IC uPC4570G2	
IC504	8-759-106-02	IC uPC4570G2	
IC505	8-759-106-02	IC uPC4570G2	
IC506	8-759-106-02	IC uPC4570G2	
IC601	8-759-567-30	IC CXD8788Q	
IC701	8-759-598-87	IC CXD8791AQ	
IC702	8-759-337-40	IC NJM2904V(TE2)	
IC801	8-759-522-13	IC BA5981FP-E2	
IC802	8-759-567-26	IC BA5983FP-E2	
IC803	8-759-338-78	IC BA10324AFV-E2	
IC901	8-759-342-94	IC IDT71256SA20Y	
IC902	8-759-557-35	IC M51943BML-600C	
IC903	8-759-678-10	IC M30622MA-A38FP	
IC904	8-759-643-42	IC CXD9511AQ	
IC905	8-759-460-72	IC BA033FP-E2	
IC906	8-759-657-47	IC AK4527	
IC907	8-759-639-35	IC LC89055W-RA8	
IC908	8-759-497-44	IC TC7WH125FU(TE12R)	
		< COIL >	
L001	1-414-754-11	INDUCTOR 10uH	
L402	1-414-754-11	INDUCTOR 10uH	
L901	1-414-754-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q801	8-729-015-74	TRANSISTOR UN5111	
Q901	8-729-230-63	TRANSISTOR 2SC4116-YG	
Q902	8-729-015-76	TRANSISTOR UN5211	
Q903	8-729-230-63	TRANSISTOR 2SC4116-YG	
Q905	8-729-015-76	TRANSISTOR UN5211	
Q906	8-729-015-74	TRANSISTOR UN5111	
Q907	8-729-015-74	TRANSISTOR UN5111	
Q908	8-729-015-74	TRANSISTOR UN5111	
Q909	8-729-015-74	TRANSISTOR UN5111	
Q910	8-729-015-74	TRANSISTOR UN5111	
		< RESISTOR >	
R001	1-216-833-91	RES-CHIP 10K 5% 1/16W	
R002	1-216-833-91	RES-CHIP 10K 5% 1/16W	
R003	1-216-833-91	RES-CHIP 10K 5% 1/16W	
R004	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R005	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R006	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R007	1-216-833-91	RES-CHIP 10K 5% 1/16W	
R009	1-216-864-11	METAL CHIP 0 5% 1/16W	
R011	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R012	1-216-833-91	RES-CHIP 10K 5% 1/16W	

DVD

Ref. No.	Part No.	Description			Remarks
R014	1-216-801-11	METAL CHIP	22	5%	1/16W
R035	1-216-821-11	METAL CHIP	1K	5%	1/16W
R036	1-216-821-11	METAL CHIP	1K	5%	1/16W
R037	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R039	1-216-821-11	METAL CHIP	1K	5%	1/16W
R041	1-216-821-11	METAL CHIP	1K	5%	1/16W
R042	1-216-821-11	METAL CHIP	1K	5%	1/16W
R044	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R045	1-216-833-91	RES-CHIP	10K	5%	1/16W
R048	1-216-821-11	METAL CHIP	1K	5%	1/16W
R049	1-216-821-11	METAL CHIP	1K	5%	1/16W
R050	1-216-821-11	METAL CHIP	1K	5%	1/16W
R053	1-216-833-91	RES-CHIP	10K	5%	1/16W
R202	1-216-801-11	METAL CHIP	22	5%	1/16W
R203	1-216-833-91	RES-CHIP	10K	5%	1/16W
R204	1-216-833-91	RES-CHIP	10K	5%	1/16W
R205	1-216-845-11	METAL CHIP	100K	5%	1/16W
R206	1-216-845-11	METAL CHIP	100K	5%	1/16W
R207	1-216-833-91	RES-CHIP	10K	5%	1/16W
R212	1-216-864-11	METAL CHIP	0	5%	1/16W
R213	1-216-801-11	METAL CHIP	22	5%	1/16W
R217	1-216-833-91	RES-CHIP	10K	5%	1/16W
R222	1-216-833-91	RES-CHIP	10K	5%	1/16W
R223	1-216-833-91	RES-CHIP	10K	5%	1/16W
R225	1-216-833-91	RES-CHIP	10K	5%	1/16W
R227	1-216-813-11	METAL CHIP	220	5%	1/16W
R228	1-216-813-11	METAL CHIP	220	5%	1/16W
R229	1-216-813-11	METAL CHIP	220	5%	1/16W
R230	1-216-813-11	METAL CHIP	220	5%	1/16W
R231	1-216-813-11	METAL CHIP	220	5%	1/16W
R232	1-216-813-11	METAL CHIP	220	5%	1/16W
R235	1-216-864-11	METAL CHIP	0	5%	1/16W
R238	1-216-238-91	RES-CHIP	47K	5%	1/8W
R240	1-216-246-00	RES-CHIP	100K	5%	1/8W
R241	1-216-238-91	RES-CHIP	47K	5%	1/8W
R242	1-216-833-91	RES-CHIP	10K	5%	1/16W
R243	1-216-833-91	RES-CHIP	10K	5%	1/16W
R244	1-216-833-91	RES-CHIP	10K	5%	1/16W
R305	1-218-879-11	METAL CHIP	22K	0.5%	1/16W
R306	1-218-831-11	METAL CHIP	220	0.5%	1/16W
R307	1-218-883-11	METAL CHIP	33K	0.5%	1/16W
R308	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R309	1-216-838-11	METAL CHIP	27K	5%	1/16W
R310	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R313	1-216-833-91	RES-CHIP	10K	5%	1/16W
R314	1-216-833-91	RES-CHIP	10K	5%	1/16W
R315	1-216-833-91	RES-CHIP	10K	5%	1/16W
R316	1-218-855-11	METAL CHIP	2.2K	0.5%	1/16W
R317	1-218-871-11	METAL CHIP	10K	0.5%	1/16W
R318	1-216-849-11	METAL CHIP	220K	5%	1/16W
R319	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R320	1-218-853-11	METAL CHIP	1.8K	0.5%	1/16W
R321	1-218-847-11	METAL CHIP	1K	0.5%	1/16W
R322	1-218-871-11	METAL CHIP	10K	0.5%	1/16W
R323	1-216-833-91	RES-CHIP	10K	5%	1/16W
R324	1-216-833-91	RES-CHIP	10K	5%	1/16W
R325	1-216-833-91	RES-CHIP	10K	5%	1/16W
R326	1-216-833-91	RES-CHIP	10K	5%	1/16W
R327	1-216-833-91	RES-CHIP	10K	5%	1/16W
R328	1-216-833-91	RES-CHIP	10K	5%	1/16W
R329	1-216-833-91	RES-CHIP	10K	5%	1/16W
R330	1-216-833-91	RES-CHIP	10K	5%	1/16W
R331	1-216-833-91	RES-CHIP	10K	5%	1/16W
R332	1-216-833-91	RES-CHIP	10K	5%	1/16W
R337	1-216-809-11	METAL CHIP	100	5%	1/16W
R338	1-216-833-91	RES-CHIP	10K	5%	1/16W
R339	1-216-833-91	RES-CHIP	10K	5%	1/16W
R340	1-216-833-91	RES-CHIP	10K	5%	1/16W
R341	1-216-809-11	METAL CHIP	100	5%	1/16W
R403	1-216-833-91	RES-CHIP	10K	5%	1/16W
R404	1-216-864-11	METAL CHIP	0	5%	1/16W
R405	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R406	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R407	1-216-833-91	RES-CHIP	10K	5%	1/16W
R409	1-216-864-11	METAL CHIP	0	5%	1/16W
R410	1-216-821-11	METAL CHIP	1K	5%	1/16W
R411	1-216-833-91	RES-CHIP	10K	5%	1/16W
R413	1-216-864-11	METAL CHIP	0	5%	1/16W
R426	1-216-813-11	METAL CHIP	220	5%	1/16W
R427	1-216-813-11	METAL CHIP	220	5%	1/16W
R428	1-216-813-11	METAL CHIP	220	5%	1/16W
R429	1-216-813-11	METAL CHIP	220	5%	1/16W
R430	1-216-813-11	METAL CHIP	220	5%	1/16W
R431	1-216-813-11	METAL CHIP	220	5%	1/16W
R501	1-216-815-11	METAL CHIP	330	5%	1/16W
R502	1-216-815-11	METAL CHIP	330	5%	1/16W
R503	1-216-815-11	METAL CHIP	330	5%	1/16W
R504	1-216-815-11	METAL CHIP	330	5%	1/16W
R505	1-216-833-91	RES-CHIP	10K	5%	1/16W
R506	1-216-833-91	RES-CHIP	10K	5%	1/16W
R507	1-216-833-91	RES-CHIP	10K	5%	1/16W
R508	1-216-833-91	RES-CHIP	10K	5%	1/16W
R509	1-216-833-91	RES-CHIP	10K	5%	1/16W
R511	1-216-864-11	METAL CHIP	0	5%	1/16W
R512	1-216-833-91	RES-CHIP	10K	5%	1/16W
R514	1-216-864-11	METAL CHIP	0	5%	1/16W
R515	1-216-833-91	RES-CHIP	10K	5%	1/16W
R516	1-216-833-91	RES-CHIP	10K	5%	1/16W
R517	1-216-839-11	METAL CHIP	33K	5%	1/16W
R518	1-216-833-91	RES-CHIP	10K	5%	1/16W
R519	1-216-833-91	RES-CHIP	10K	5%	1/16W
R520	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R521	1-216-833-91	RES-CHIP	10K	5%	1/16W
R522	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R523	1-216-864-11	METAL CHIP	0	5%	1/16W
R525	1-216-864-11	METAL CHIP	0	5%	1/16W
R527	1-216-839-11	METAL CHIP	33K	5%	1/16W
R528	1-216-833-91	RES-CHIP	10K	5%	1/16W
R529	1-216-295-91	SHORT	0		
R530	1-216-295-91	SHORT	0		
R531	1-216-833-91	RES-CHIP	10K	5%	1/16W
R532	1-216-833-91	RES-CHIP	10K	5%	1/16W
R533	1-216-821-11	METAL CHIP	1K	5%	1/16W
R534	1-216-821-11	METAL CHIP	1K	5%	1/16W
R535	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R536	1-216-821-11	METAL CHIP	1K	5%	1/16W
R537	1-216-821-11	METAL CHIP	1K	5%	1/16W
R538	1-216-821-11	METAL CHIP	1K	5%	1/16W
R539	1-216-821-11	METAL CHIP	1K	5%	1/16W
R546	1-216-829-11	METAL CHIP	4.7K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R553	1-216-295-91	SHORT	0		
R601	1-216-833-91	RES-CHIP	10K	5%	1/16W
R602	1-216-833-91	RES-CHIP	10K	5%	1/16W
R604	1-216-833-91	RES-CHIP	10K	5%	1/16W
R605	1-216-833-91	RES-CHIP	10K	5%	1/16W
R606	1-216-833-91	RES-CHIP	10K	5%	1/16W
R607	1-220-151-11	RES-CHIP	51	5%	1/16W
R630	1-216-833-91	RES-CHIP	10K	5%	1/16W
R631	1-216-833-91	RES-CHIP	10K	5%	1/16W
R632	1-216-833-91	RES-CHIP	10K	5%	1/16W
R633	1-216-833-91	RES-CHIP	10K	5%	1/16W
R634	1-216-833-91	RES-CHIP	10K	5%	1/16W
R635	1-216-833-91	RES-CHIP	10K	5%	1/16W
R636	1-216-815-11	METAL CHIP	330	5%	1/16W
R637	1-216-809-11	METAL CHIP	100	5%	1/16W
R642	1-216-809-11	METAL CHIP	100	5%	1/16W
R643	1-216-815-11	METAL CHIP	330	5%	1/16W
R647	1-216-833-91	RES-CHIP	10K	5%	1/16W
R701	1-216-805-11	METAL CHIP	47	5%	1/16W
R702	1-216-817-11	METAL CHIP	470	5%	1/16W
R703	1-216-817-11	METAL CHIP	470	5%	1/16W
R704	1-216-817-11	METAL CHIP	470	5%	1/16W
R705	1-216-817-11	METAL CHIP	470	5%	1/16W
R706	1-216-821-11	METAL CHIP	1K	5%	1/16W
R707	1-216-844-11	METAL CHIP	82K	5%	1/16W
R708	1-216-844-11	METAL CHIP	82K	5%	1/16W
R709	1-216-844-11	METAL CHIP	82K	5%	1/16W
R710	1-216-844-11	METAL CHIP	82K	5%	1/16W
R711	1-216-833-91	RES-CHIP	10K	5%	1/16W
R712	1-216-839-11	METAL CHIP	33K	5%	1/16W
R720	1-216-821-11	METAL CHIP	1K	5%	1/16W
R721	1-216-821-11	METAL CHIP	1K	5%	1/16W
R722	1-216-801-11	METAL CHIP	22	5%	1/16W
R748	1-216-833-91	RES-CHIP	10K	5%	1/16W
R751	1-216-821-11	METAL CHIP	1K	5%	1/16W
R752	1-216-821-11	METAL CHIP	1K	5%	1/16W
R755	1-216-833-91	RES-CHIP	10K	5%	1/16W
R757	1-216-864-11	METAL CHIP	0	5%	1/16W
R758	1-216-864-11	METAL CHIP	0	5%	1/16W
R801	1-216-841-11	METAL CHIP	47K	5%	1/16W
R802	1-216-841-11	METAL CHIP	47K	5%	1/16W
R803	1-216-841-11	METAL CHIP	47K	5%	1/16W
R804	1-216-841-11	METAL CHIP	47K	5%	1/16W
R805	1-216-840-11	METAL CHIP	39K	5%	1/16W
R806	1-216-840-11	METAL CHIP	39K	5%	1/16W
R807	1-216-835-11	METAL CHIP	15K	5%	1/16W
R808	1-216-835-11	METAL CHIP	15K	5%	1/16W
R809	1-216-844-11	METAL CHIP	82K	5%	1/16W
R810	1-216-844-11	METAL CHIP	82K	5%	1/16W
R811	1-218-907-11	METAL CHIP	330K	0.5%	1/16W
R812	1-218-897-11	METAL CHIP	120K	0.5%	1/16W
R813	1-218-897-11	METAL CHIP	120K	0.5%	1/16W
R814	1-218-907-11	METAL CHIP	330K	0.5%	1/16W
R815	1-216-836-11	METAL CHIP	18K	5%	1/16W
R816	1-216-845-11	METAL CHIP	100K	5%	1/16W
R817	1-216-852-11	METAL CHIP	390K	5%	1/16W
R818	1-216-852-11	METAL CHIP	390K	5%	1/16W
R819	1-216-849-11	METAL CHIP	220K	5%	1/16W
R820	1-216-851-11	METAL CHIP	330K	5%	1/16W
R821	1-216-840-11	METAL CHIP	39K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R822	1-216-845-11	METAL CHIP	100K	5%	1/16W
R823	1-216-833-91	RES-CHIP	10K	5%	1/16W
R824	1-216-833-91	RES-CHIP	10K	5%	1/16W
R825	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R831	1-216-833-91	RES-CHIP	10K	5%	1/16W
R832	1-216-833-91	RES-CHIP	10K	5%	1/16W
R834	1-216-847-11	METAL CHIP	150K	5%	1/16W
R835	1-216-847-11	METAL CHIP	150K	5%	1/16W
R836	1-216-847-11	METAL CHIP	150K	5%	1/16W
R837	1-216-844-11	METAL CHIP	82K	5%	1/16W
R838	1-216-848-11	METAL CHIP	180K	5%	1/16W
R839	1-216-848-11	METAL CHIP	180K	5%	1/16W
R840	1-216-848-11	METAL CHIP	180K	5%	1/16W
R841	1-216-843-11	METAL CHIP	68K	5%	1/16W
R842	1-216-844-11	METAL CHIP	82K	5%	1/16W
R843	1-216-844-11	METAL CHIP	82K	5%	1/16W
R844	1-216-843-11	METAL CHIP	68K	5%	1/16W
R845	1-216-843-11	METAL CHIP	68K	5%	1/16W
R846	1-216-841-11	METAL CHIP	47K	5%	1/16W
R847	1-216-296-91	SHORT	0		
R851	1-216-833-91	RES-CHIP	10K	5%	1/16W
R852	1-216-833-91	RES-CHIP	10K	5%	1/16W
R853	1-216-833-91	RES-CHIP	10K	5%	1/16W
R854	1-216-833-91	RES-CHIP	10K	5%	1/16W
R855	1-216-834-11	METAL CHIP	12K	5%	1/16W
R856	1-216-836-11	METAL CHIP	18K	5%	1/16W
R857	1-218-899-11	METAL CHIP	150K	0.5%	1/16W
R858	1-218-899-11	METAL CHIP	150K	0.5%	1/16W
R859	1-218-889-11	METAL CHIP	56K	0.5%	1/16W
R860	1-218-889-11	METAL CHIP	56K	0.5%	1/16W
R861	1-216-296-91	SHORT	0		
R864	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R865	1-216-833-91	RES-CHIP	10K	5%	1/16W
R866	1-216-833-91	RES-CHIP	10K	5%	1/16W
R867	1-216-833-91	RES-CHIP	10K	5%	1/16W
R868	1-216-833-91	RES-CHIP	10K	5%	1/16W
R869	1-216-833-91	RES-CHIP	10K	5%	1/16W
R870	1-216-815-11	METAL CHIP	330	5%	1/16W
R871	1-216-817-11	METAL CHIP	470	5%	1/16W
R872	1-216-815-11	METAL CHIP	330	5%	1/16W
R873	1-216-821-11	METAL CHIP	1K	5%	1/16W
R901	1-216-833-91	RES-CHIP	10K	5%	1/16W
R902	1-216-813-11	METAL CHIP	220	5%	1/16W
R910	1-216-813-11	METAL CHIP	220	5%	1/16W
R911	1-216-813-11	METAL CHIP	220	5%	1/16W
R912	1-216-813-11	METAL CHIP	220	5%	1/16W
R913	1-216-815-11	METAL CHIP	330	5%	1/16W
R914	1-216-833-91	RES-CHIP	10K	5%	1/16W
R915	1-216-841-11	METAL CHIP	47K	5%	1/16W
R916	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R917	1-216-841-11	METAL CHIP	47K	5%	1/16W
R918	1-216-174-00	RES-CHIP	100	5%	1/8W
R919	1-216-813-11	METAL CHIP	220	5%	1/16W
R920	1-216-833-91	RES-CHIP	10K	5%	1/16W
R921	1-216-833-91	RES-CHIP	10K	5%	1/16W
R922	1-216-833-91	RES-CHIP	10K	5%	1/16W
R923	1-216-833-91	RES-CHIP	10K	5%	1/16W
R924	1-216-833-91	RES-CHIP	10K	5%	1/16W
R925	1-216-833-91	RES-CHIP	10K	5%	1/16W
R926	1-216-833-91	RES-CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R927	1-216-821-11	METAL CHIP	1K	5%	1/16W
R928	1-216-833-91	RES-CHIP	10K	5%	1/16W
R929	1-216-833-91	RES-CHIP	10K	5%	1/16W
R933	1-216-833-91	RES-CHIP	10K	5%	1/16W
R934	1-216-833-91	RES-CHIP	10K	5%	1/16W
R935	1-216-833-91	RES-CHIP	10K	5%	1/16W
R936	1-216-813-11	METAL CHIP	220	5%	1/16W
R937	1-216-833-91	RES-CHIP	10K	5%	1/16W
R938	1-216-821-11	METAL CHIP	1K	5%	1/16W
R940	1-216-821-11	METAL CHIP	1K	5%	1/16W
R942	1-216-833-91	RES-CHIP	10K	5%	1/16W
R943	1-216-833-91	RES-CHIP	10K	5%	1/16W
R944	1-216-833-91	RES-CHIP	10K	5%	1/16W
R945	1-216-821-11	METAL CHIP	1K	5%	1/16W
R946	1-216-857-11	METAL CHIP	1M	5%	1/16W
R947	1-216-809-11	METAL CHIP	100	5%	1/16W
R948	1-216-821-11	METAL CHIP	1K	5%	1/16W
R949	1-216-809-11	METAL CHIP	100	5%	1/16W
R950	1-216-809-11	METAL CHIP	100	5%	1/16W
R951	1-216-809-11	METAL CHIP	100	5%	1/16W
R952	1-216-809-11	METAL CHIP	100	5%	1/16W
R953	1-216-833-91	RES-CHIP	10K	5%	1/16W
R954	1-216-815-11	METAL CHIP	330	5%	1/16W
R955	1-216-821-11	METAL CHIP	1K	5%	1/16W
R956	1-216-821-11	METAL CHIP	1K	5%	1/16W
R957	1-216-818-11	METAL CHIP	560	5%	1/16W
R959	1-216-833-91	RES-CHIP	10K	5%	1/16W
R960	1-216-809-11	METAL CHIP	100	5%	1/16W
R961	1-216-833-91	RES-CHIP	10K	5%	1/16W
R962	1-216-821-11	METAL CHIP	1K	5%	1/16W
R963	1-218-285-11	RES-CHIP	75	5%	1/16W
R964	1-218-272-11	RES-CHIP	5.1K	5%	1/16W
R965	1-218-272-11	RES-CHIP	5.1K	5%	1/16W
R966	1-216-815-11	METAL CHIP	330	5%	1/16W
R967	1-216-815-11	METAL CHIP	330	5%	1/16W
R968	1-216-815-11	METAL CHIP	330	5%	1/16W
R969	1-216-815-11	METAL CHIP	330	5%	1/16W
R970	1-216-815-11	METAL CHIP	330	5%	1/16W
R971	1-216-815-11	METAL CHIP	330	5%	1/16W
R972	1-216-815-11	METAL CHIP	330	5%	1/16W
R973	1-216-815-11	METAL CHIP	330	5%	1/16W
R974	1-216-815-11	METAL CHIP	330	5%	1/16W
R975	1-216-833-91	RES-CHIP	10K	5%	1/16W
R976	1-216-833-91	RES-CHIP	10K	5%	1/16W
R977	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R978	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R979	1-216-821-11	METAL CHIP	1K	5%	1/16W
R982	1-216-864-11	METAL CHIP	0	5%	1/16W
R983	1-216-821-11	METAL CHIP	1K	5%	1/16W
R984	1-216-809-11	METAL CHIP	100	5%	1/16W
R985	1-216-821-11	METAL CHIP	1K	5%	1/16W
R986	1-216-833-91	RES-CHIP	10K	5%	1/16W
R987	1-216-821-11	METAL CHIP	1K	5%	1/16W
R988	1-216-809-11	METAL CHIP	100	5%	1/16W
R989	1-216-845-11	METAL CHIP	100K	5%	1/16W
R990	1-216-821-11	METAL CHIP	1K	5%	1/16W
R991	1-216-833-91	RES-CHIP	10K	5%	1/16W
R992	1-216-833-91	RES-CHIP	10K	5%	1/16W
R994	1-216-833-91	RES-CHIP	10K	5%	1/16W
R995	1-216-833-91	RES-CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R997	1-216-833-91	RES-CHIP	10K	5%	1/16W
R999	1-216-821-11	METAL CHIP	1K	5%	1/16W
R1000	1-216-821-11	METAL CHIP	1K	5%	1/16W
R1001	1-216-821-11	METAL CHIP	1K	5%	1/16W
R1002	1-216-821-11	METAL CHIP	1K	5%	1/16W
R1003	1-216-821-11	METAL CHIP	1K	5%	1/16W
R1004	1-216-833-91	RES-CHIP	10K	5%	1/16W
R1005	1-216-833-91	RES-CHIP	10K	5%	1/16W
R1007	1-216-295-91	SHORT	0		
R1009	1-216-809-11	METAL CHIP	100	5%	1/16W
R1010	1-216-837-11	METAL CHIP	22K	5%	1/16W
R1011	1-216-833-91	RES-CHIP	10K	5%	1/16W
R1012	1-216-845-11	METAL CHIP	100K	5%	1/16W
R1022	1-216-809-11	METAL CHIP	100	5%	1/16W
R1037	1-216-837-11	METAL CHIP	22K	5%	1/16W
R1045	1-216-841-11	METAL CHIP	47K	5%	1/16W
R1053	1-216-837-11	METAL CHIP	22K	5%	1/16W
R1054	1-216-841-11	METAL CHIP	47K	5%	1/16W
R1056	1-216-841-11	METAL CHIP	47K	5%	1/16W
R1057	1-216-837-11	METAL CHIP	22K	5%	1/16W
R1058	1-216-837-11	METAL CHIP	22K	5%	1/16W
R1062	1-216-841-11	METAL CHIP	47K	5%	1/16W
R1068	1-216-841-11	METAL CHIP	47K	5%	1/16W
R1504	1-216-815-11	METAL CHIP	330	5%	1/16W
R1505	1-216-815-11	METAL CHIP	330	5%	1/16W
R1506	1-216-815-11	METAL CHIP	330	5%	1/16W
R1507	1-216-815-11	METAL CHIP	330	5%	1/16W
R1508	1-216-815-11	METAL CHIP	330	5%	1/16W
R1509	1-216-815-11	METAL CHIP	330	5%	1/16W
R1510	1-216-815-11	METAL CHIP	330	5%	1/16W
R1511	1-216-815-11	METAL CHIP	330	5%	1/16W
R1512	1-216-833-91	RES-CHIP	10K	5%	1/16W
R1513	1-216-833-91	RES-CHIP	10K	5%	1/16W

< COMPOSITION CIRCUIT BLOCK >

Ref. No.	Part No.	Description
* RB001	1-233-270-11	NETWORK, RES (8 GANG) 10K
* RB201	1-233-270-11	NETWORK, RES (8 GANG) 10K
* RB202	1-233-270-11	NETWORK, RES (8 GANG) 10K
* RB203	1-233-270-11	NETWORK, RES (8 GANG) 10K
* RB204	1-233-270-11	NETWORK, RES (8 GANG) 10K
* RB402	1-233-270-11	NETWORK, RES (8 GANG) 10K
* RB601	1-233-270-11	NETWORK, RES (8 GANG) 10K

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description
RV401	1-223-583-11	RES, ADJ, CARBON 1K

< VIBRATOR >

Ref. No.	Part No.	Description
X001	1-781-188-21	OSCILLATOR, CRYSTAL 27MHz
X201	1-781-185-21	VIBRATOR, CERAMIC 12.5MHz
X501	1-767-922-11	VIBRATOR, CERAMIC 16MHz
X503	1-781-465-21	VIBRATOR, CRYSTAL 12.288MHz

****

A-4473-111-A FFC BOARD, COMPLETE

****

< CONNECTOR >

Ref. No.	Part No.	Description
* CN1606	1-770-335-11	PIN, CONNECTOR (PC BOARD) 20P
CN1607	1-568-802-11	SOCKET, CONNECTOR 19P

****

Ref. No.	Part No.	Description				Remarks
	1-675-724-11	INIT/COUNT SW BOARD				
		*******************				
		< SWITCH >				
S705	1-771-264-11	SWITCH, PUSH(DETECTION)(1 KEY) (INIT)				
S706	1-771-264-11	SWITCH, PUSH(DETECTION)(1 KEY) (COUNT)				
***						
	1-675-723-11	IN SW BOARD				
		***********				
		< CONNECTOR >				
* CN710	1-568-941-11	PIN, CONNECTOR 3P				
		< SWITCH >				
S703	1-771-218-11	SWITCH, MICRO (MID IN)				
S704	1-771-218-11	SWITCH, MICRO (IN)				
***						
	1-675-728-11	LOAD MOTOR BOARD				
		*******************				
		< CAPACITOR >				
C703	1-162-306-11	CERAMIC	0.01uF	30.00%	16V	
C704	1-126-964-11	ELECT	10uF	20.00%	50V	
C705	1-162-306-11	CERAMIC	0.01uF	30.00%	16V	
C712	1-162-306-11	CERAMIC	0.01uF	30.00%	16V	
		< CONNECTOR >				
* CN713	1-568-954-11	PIN, CONNECTOR 5P				
		< DIODE >				
D702	8-719-109-85	DIODE RD5.1ES-B2				
		< IC >				
IC702	8-759-633-65	IC M54641L				
		< RESISTOR >				
R703	1-249-411-11	CARBON	330	5%	1/4W	
R704	1-249-401-11	CARBON	47	5%	1/4W	F
***						
	A-4473-105-A	MAIN BOARD, COMPLETE				
		**********************				
	4-228-032-01	BRACKET (IC)				
	7-685-646-79	SCREW+BVTP	3X8	TYPE2 N-S		
		< CAPACITOR >				
C1101	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C1102	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C1103	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C1104	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C1105	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C1106	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C1107	1-104-664-11	ELECT	47uF	20.00%	25V	
C1108	1-104-664-11	ELECT	47uF	20.00%	25V	
C1109	1-104-665-11	ELECT	100uF	20.00%	16V	
C1110	1-104-665-11	ELECT	100uF	20.00%	16V	

Ref. No.	Part No.	Description			Remarks
C1111	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1112	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1138	1-216-295-91	SHORT	0		
C1141	1-124-903-11	ELECT	1uF	20.00%	50V
C1142	1-124-903-11	ELECT	1uF	20.00%	50V
C1153	1-126-964-11	ELECT	10uF	20.00%	50V
C1154	1-126-964-11	ELECT	10uF	20.00%	50V
C1201	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C1202	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C1203	1-137-457-11	MYLAR	0.0027uF	5.00%	50V
C1204	1-137-457-11	MYLAR	0.0027uF	5.00%	50V
C1205	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C1206	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C1207	1-136-153-00	FILM	0.01uF	5%	50V
C1208	1-136-153-00	FILM	0.01uF	5%	50V
C1209	1-124-903-11	ELECT	1uF	20.00%	50V
C1210	1-124-903-11	ELECT	1uF	20.00%	50V
C1211	1-124-903-11	ELECT	1uF	20.00%	50V
C1212	1-124-903-11	ELECT	1uF	20.00%	50V
C1213	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1214	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1215	1-124-903-11	ELECT	1uF	20.00%	50V
C1216	1-124-903-11	ELECT	1uF	20.00%	50V
C1217	1-104-664-11	ELECT	47uF	20.00%	25V
C1218	1-104-664-11	ELECT	47uF	20.00%	25V
C1219	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1220	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1221	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C1222	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C1223	1-137-457-11	MYLAR	0.0027uF	5.00%	50V
C1224	1-137-457-11	MYLAR	0.0027uF	5.00%	50V
C1225	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C1226	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C1227	1-136-153-00	FILM	0.01uF	5%	50V
C1228	1-136-153-00	FILM	0.01uF	5%	50V
C1229	1-124-903-11	ELECT	1uF	20.00%	50V
C1230	1-124-903-11	ELECT	1uF	20.00%	50V
C1231	1-124-903-11	ELECT	1uF	20.00%	50V
C1232	1-124-903-11	ELECT	1uF	20.00%	50V
C1233	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1234	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C1235	1-124-903-11	ELECT	1uF	20.00%	50V
C1236	1-124-903-11	ELECT	1uF	20.00%	50V
C1237	1-104-664-11	ELECT	47uF	20.00%	25V
C1238	1-104-664-11	ELECT	47uF	20.00%	25V
C1239	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1240	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1243	1-104-664-11	ELECT	47uF	20.00%	16V
C1244	1-104-664-11	ELECT	47uF	20.00%	16V
C1248	1-124-903-11	ELECT	1uF	20.00%	50V
C1249	1-124-903-11	ELECT	1uF	20.00%	50V
C1250	1-124-903-11	ELECT	1uF	20.00%	50V
C1251	1-124-903-11	ELECT	1uF	20.00%	50V
C1252	1-124-903-11	ELECT	1uF	20.00%	50V
C1253	1-124-903-11	ELECT	1uF	20.00%	50V
C1254	1-124-903-11	ELECT	1uF	20.00%	50V
C1255	1-124-903-11	ELECT	1uF	20.00%	50V
C1256	1-126-964-11	ELECT	10uF	20.00%	50V
C1257	1-126-964-11	ELECT	10uF	20.00%	50V
C1258	1-126-964-11	ELECT	10uF	20.00%	50V

MAIN

Ref. No.	Part No.	Description			Remarks
C1259	1-126-964-11	ELECT	10uF	20.00%	50V
C1260	1-126-964-11	ELECT	10uF	20.00%	50V
C1261	1-126-964-11	ELECT	10uF	20.00%	50V
C1301	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1302	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1303	1-126-964-11	ELECT	10uF	20.00%	50V
C1304	1-126-964-11	ELECT	10uF	20.00%	50V
C1305	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1306	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1307	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1308	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1309	1-126-964-11	ELECT	10uF	20.00%	50V
C1310	1-126-964-11	ELECT	10uF	20.00%	50V
C1311	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1312	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1313	1-126-964-11	ELECT	10uF	20.00%	50V
C1314	1-126-964-11	ELECT	10uF	20.00%	50V
C1315	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1316	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1317	1-124-903-11	ELECT	1uF	20.00%	50V
C1319	1-124-903-11	ELECT	1uF	20.00%	50V
C1320	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1321	1-124-903-11	ELECT	1uF	20.00%	50V
C1322	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1323	1-124-903-11	ELECT	1uF	20.00%	50V
C1324	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1325	1-124-903-11	ELECT	1uF	20.00%	50V
C1326	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1327	1-124-903-11	ELECT	1uF	20.00%	50V
C1328	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1329	1-104-665-11	ELECT	100uF	20.00%	25V
C1330	1-136-171-00	MYLAR	0.33uF	5.00%	50V
C1331	1-136-170-00	MYLAR	0.27uF	5.00%	50V
C1332	1-104-665-11	ELECT	100uF	20.00%	25V
C1333	1-137-189-11	MYLAR	0.18uF	5.00%	50V
C1334	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1335	1-124-903-11	ELECT	1uF	20.00%	50V
C1336	1-124-903-11	ELECT	1uF	20.00%	50V
C1337	1-124-464-11	ELECT	0.22uF	20%	50V
C1339	1-136-164-00	MYLAR	0.082uF	5.00%	50V
C1340	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1341	1-136-171-00	MYLAR	0.33uF	5.00%	50V
C1342	1-136-171-00	MYLAR	0.33uF	5.00%	50V
C1343	1-124-903-11	ELECT	1uF	20.00%	50V
C1344	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1405	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
C1411	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1412	1-104-665-11	ELECT	100uF	20.00%	25V
C1413	1-104-665-11	ELECT	100uF	20.00%	25V
C1414	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1416	1-104-665-11	ELECT	100uF	20.00%	25V
C1417	1-104-665-11	ELECT	100uF	20.00%	25V
C1418	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1618	1-104-664-11	ELECT	47uF	20.00%	25V
C1619	1-124-902-00	ELECT	0.47uF	20%	50V
C1815	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C1816	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C1929	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1930	1-104-665-11	ELECT	100uF	20.00%	25V
C1931	1-136-165-00	MYLAR	0.1uF	5.00%	50V

Ref. No.	Part No.	Description			Remarks
C1932	1-104-665-11	ELECT	100uF	20.00%	25V
C1945	1-216-295-91	SHORT	0		
		< CONNECTOR >			
* CN1102	1-568-826-11	SOCKET, CONNECTOR 7P			
CN1301	1-691-771-11	PLUG (MICRO CONNECTOR) 9P			
* CN1401	1-568-832-11	SOCKET, CONNECTOR 13P			
CN1602	1-568-802-11	SOCKET, CONNECTOR 19P			
CN1603	1-779-294-11	CONNECTOR,FFC(LIF(NON-ZIF))26P			
CN1604	1-784-213-11	CONNECTOR,FFC(LIF(NON-ZIF))15P			
CN1605	1-779-295-11	CONNECTOR,FFC(LIF(NON-ZIF))27P			
CN1910	1-691-773-11	PLUG (MICRO CONNECTOR) 11P			
CN1912	1-766-270-11	PIN, CONNECTOR (PC BOARD) 8P			
CN1913	1-766-269-11	PIN, CONNECTOR (PC BOARD) 7P			
CN1914	1-766-268-11	PIN, CONNECTOR (PC BOARD) 6P			
* CN1915	1-564-506-11	PLUG, CONNECTOR 3P			
		< DIODE >			
D1301	8-719-991-33	DIODE 1SS133T-77			
D1302	8-719-991-33	DIODE 1SS133T-77			
D1303	8-719-991-33	DIODE 1SS133T-77			
D1401	8-719-110-09	DIODE RD8.2ES-B3			
D1403	8-719-921-77	DIODE MTZN-10C			
D1601	8-719-991-33	DIODE 1SS133T-77			
D1602	8-719-991-33	DIODE 1SS133T-77			
D1603	8-719-991-33	DIODE 1SS133T-77			
D1604	8-719-991-33	DIODE 1SS133T-77			
D1618	8-719-991-33	DIODE 1SS133T-77			
D1801	8-719-110-14	DIODE RD9.1ES-B3			
		< IC >			
IC1105	8-759-000-48	IC MC14052BCP			
IC1106	8-759-106-02	IC uPC4570G2			
IC1107	8-759-604-35	IC M5F78M05L			
IC1108	8-759-701-65	IC NJM79M05FA			
IC1201	8-759-462-99	IC TC9184AP			
IC1202	8-759-106-02	IC uPC4570G2			
IC1203	8-759-462-99	IC TC9184AP			
IC1204	8-759-106-02	IC uPC4570G2			
IC1205	8-759-658-33	IC TC9482F(EL)			
IC1206	8-759-106-02	IC uPC4570G2			
IC1207	8-759-106-02	IC uPC4570G2			
IC1208	8-759-106-02	IC uPC4570G2			
IC1301	8-759-106-02	IC uPC4570G2			
IC1302	8-759-106-02	IC uPC4570G2			
IC1303	8-759-106-02	IC uPC4570G2			
IC1305	8-759-106-02	IC uPC4570G2			
IC1306	8-759-106-02	IC uPC4570G2			
IC1801	8-749-923-05	IC TORX178 (DIGITAL OPTICAL)			
IC1901	8-759-604-40	IC M5F78M15			
IC1902	8-759-604-46	IC M5F79M15			
		< JACK >			
J1101	1-766-394-11	JACK, PIN 6P (TV/VIDEO/AUX INPUT)			
J1801	1-764-188-21	JACK (SMALL TYPE) (DIA. 3.5)			(CONTROL S IN)

Ref. No.	Part No.	Description			Remarks
		< TRANSISTOR >			
Q1301	8-729-040-96	TRANSISTOR	2SD1938(F)		
Q1302	8-729-040-96	TRANSISTOR	2SD1938(F)		
Q1303	8-729-040-96	TRANSISTOR	2SD1938(F)		
Q1304	8-729-040-96	TRANSISTOR	2SD1938(F)		
Q1305	8-729-040-96	TRANSISTOR	2SD1938(F)		
Q1306	8-729-224-61	TRANSISTOR	2SK246-Y		
Q1307	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1308	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1309	8-729-040-96	TRANSISTOR	2SD1938(F)		
Q1310	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q1401	8-729-801-93	TRANSISTOR	2SD1387		
Q1402	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q1403	8-729-901-00	TRANSISTOR	DTC124EK		
Q1404	8-729-801-93	TRANSISTOR	2SD1387		
Q1405	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q1406	8-729-901-00	TRANSISTOR	DTC124EK		
Q1408	8-729-801-93	TRANSISTOR	2SD1387		
Q1409	8-729-901-00	TRANSISTOR	DTC124EK		
Q1410	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q1601	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q1602	8-729-216-22	TRANSISTOR	2SA1162-G		
		< RESISTOR >			
R1101	1-216-295-91	SHORT	0		
R1102	1-216-295-91	SHORT	0		
R1103	1-216-295-91	SHORT	0		
R1124	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1125	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1129	1-216-025-91	RES-CHIP	100	5%	1/10W
R1130	1-216-025-91	RES-CHIP	100	5%	1/10W
R1131	1-216-295-91	SHORT	0		
R1132	1-216-295-91	SHORT	0		
R1133	1-216-295-91	SHORT	0		
R1134	1-216-295-91	SHORT	0		
R1135	1-216-295-91	SHORT	0		
R1136	1-216-295-91	SHORT	0		
R1147	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1148	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1151	1-216-295-91	SHORT	0		
R1152	1-216-295-91	SHORT	0		
R1153	1-216-295-91	SHORT	0		
R1201	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1202	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1203	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1204	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1205	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1206	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1207	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1208	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1209	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R1210	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R1211	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1212	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1213	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R1214	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R1215	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1216	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1217	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1218	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1219	1-216-099-00	METAL CHIP	120K	5%	1/10W
R1220	1-216-099-00	METAL CHIP	120K	5%	1/10W
R1221	1-216-113-00	METAL CHIP	470K	5%	1/10W
R1222	1-216-113-00	METAL CHIP	470K	5%	1/10W
R1223	1-216-083-00	METAL CHIP	27K	5%	1/10W
R1224	1-216-083-00	METAL CHIP	27K	5%	1/10W
R1225	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1226	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1227	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R1228	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R1229	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1230	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1231	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R1232	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1233	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1234	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1235	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1236	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1237	1-216-099-00	METAL CHIP	120K	5%	1/10W
R1238	1-216-099-00	METAL CHIP	120K	5%	1/10W
R1239	1-216-113-00	METAL CHIP	470K	5%	1/10W
R1240	1-216-113-00	METAL CHIP	470K	5%	1/10W
R1241	1-216-083-00	METAL CHIP	27K	5%	1/10W
R1242	1-216-083-00	METAL CHIP	27K	5%	1/10W
R1243	1-216-009-91	RES-CHIP	22	5%	1/10W
R1244	1-216-009-91	RES-CHIP	22	5%	1/10W
R1245	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1246	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1247	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1248	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1249	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1250	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1251	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1252	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1253	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1254	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1255	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1256	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1257	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1258	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1259	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1260	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1261	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1262	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1263	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1264	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1301	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1302	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1303	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1304	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1305	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1306	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1307	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1308	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1309	1-216-095-00	METAL CHIP	82K	5%	1/10W
R1310	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1311	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1312	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1314	1-216-295-91	SHORT	0		

Ref. No.	Part No.	Description			Remarks
R1315	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1316	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1317	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1318	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1319	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1320	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1321	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1322	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1323	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1324	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1325	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1326	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1327	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1328	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1329	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1330	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1331	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1332	1-216-107-00	METAL CHIP	270K	5%	1/10W
R1333	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1334	1-216-107-00	METAL CHIP	270K	5%	1/10W
R1335	1-216-107-00	METAL CHIP	270K	5%	1/10W
R1336	1-216-107-00	METAL CHIP	270K	5%	1/10W
R1337	1-216-107-00	METAL CHIP	270K	5%	1/10W
R1338	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R1339	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1340	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1341	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1342	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1343	1-216-041-00	METAL CHIP	470	5%	1/10W
R1344	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1345	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1346	1-216-075-00	METAL CHIP	12K	5%	1/10W
R1347	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1348	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R1349	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1350	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1351	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1352	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R1353	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1354	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1355	1-216-017-91	RES-CHIP	47	5%	1/10W
R1356	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1357	1-216-075-00	METAL CHIP	12K	5%	1/10W
R1358	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1359	1-216-121-91	RES-CHIP	1M	5%	1/10W
R1360	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1361	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1404	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1405	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1406	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1407	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1408	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1409	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1410	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1501	1-216-295-91	SHORT	0		
R1502	1-216-295-91	SHORT	0		
R1503	1-216-295-91	SHORT	0		
R1504	1-216-295-91	SHORT	0		
R1505	1-216-295-91	SHORT	0		
R1506	1-216-295-91	SHORT	0		

Ref. No.	Part No.	Description			Remarks
R1507	1-216-295-91	SHORT	0		
R1508	1-216-295-91	SHORT	0		
R1509	1-216-295-91	SHORT	0		
R1510	1-216-295-91	SHORT	0		
R1511	1-216-295-91	SHORT	0		
R1512	1-216-295-91	SHORT	0		
R1660	1-216-295-91	SHORT	0		
R1661	1-216-295-91	SHORT	0		
R1662	1-216-025-91	RES-CHIP	100	5%	1/10W
R1663	1-216-025-91	RES-CHIP	100	5%	1/10W
R1664	1-216-025-91	RES-CHIP	100	5%	1/10W
R1665	1-216-025-91	RES-CHIP	100	5%	1/10W
R1666	1-216-025-91	RES-CHIP	100	5%	1/10W
R1667	1-216-025-91	RES-CHIP	100	5%	1/10W
R1668	1-216-025-91	RES-CHIP	100	5%	1/10W
R1669	1-216-025-91	RES-CHIP	100	5%	1/10W
R1672	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1673	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1683	1-216-025-91	RES-CHIP	100	5%	1/10W
R1684	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1685	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1686	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1687	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1688	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1689	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1690	1-216-025-91	RES-CHIP	100	5%	1/10W
R1691	1-216-025-91	RES-CHIP	100	5%	1/10W
R1692	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1693	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1696	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1697	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1698	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1801	1-216-001-00	METAL CHIP	10	5%	1/10W

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	1-675-725-11	OUT SW BOARD *************			
		< CONNECTOR >			
* CN709	1-568-943-11	PIN, CONNECTOR 5P			
CN715	1-506-481-11	PIN, CONNECTOR 2P			
		< SWITCH >			
S701	1-771-218-11	SWITCH, MICRO (MID OUT)			
S702	1-771-218-11	SWITCH, MICRO (LID)			
S708	1-771-218-11	SWITCH, MICRO (OUT)			

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	A-4473-115-A	PS BOARD, COMPLETE *******************			
	1-533-313-11	HOLDER, FUSE			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C1620	1-104-665-11	ELECT	100uF	20.00%	25V
C1623	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1802	1-104-665-11	ELECT	100uF	20.00%	25V
C1803	1-104-665-11	ELECT	100uF	20.00%	25V
C1804	1-126-963-11	ELECT	4.7uF	20.00%	50V

Ref. No.	Part No.	Description			Remarks
C1805	1-104-665-11	ELECT	100uF	20.00%	25V
C1806	1-126-964-11	ELECT	10uF	20.00%	50V
C1807	1-162-290-31	CERAMIC	470PF	10%	50V
C1808	1-162-290-31	CERAMIC	470PF	10%	50V
C1809	1-162-290-31	CERAMIC	470PF	10%	50V
C1810	1-126-971-11	ELECT	470uF	20.00%	50V
C1811	1-126-969-11	ELECT	220uF	20.00%	35V
C1901	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1902	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1903	1-117-691-11	ELECT(BLOCK)	8200uF	20.00%	50V
C1904	1-117-691-11	ELECT(BLOCK)	8200uF	20.00%	50V
C1905	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1906	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C1907	1-117-203-11	ELECT(BLOCK)	10000uF	20.00%	63V
C1908	1-117-203-11	ELECT(BLOCK)	10000uF	20.00%	63V
C1909	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1910	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1911	1-126-937-11	ELECT	4700uF	20.00%	16V
C1914	1-126-942-61	ELECT	1000uF	20.00%	16V
C1916	1-104-665-11	ELECT	100uF	20.00%	25V
C1917	1-126-972-11	ELECT	1000uF	20.00%	35V
C1918	1-124-911-11	ELECT	220uF	20%	50V
C1919	1-126-964-11	ELECT	10uF	20.00%	50V
C1920	1-126-967-11	ELECT	47uF	20.00%	50V
C1921	1-126-964-11	ELECT	10uF	20.00%	50V
C1922	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C1923	1-164-159-21	CERAMIC	0.1uF		50V
C1924	1-126-972-11	ELECT	1000uF	20.00%	35V
C1935	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1936	1-104-665-11	ELECT	100uF	20.00%	25V
C1937	1-126-942-61	ELECT	1000uF	20.00%	25V
C1938	1-104-665-11	ELECT	100uF	20.00%	25V
C1939	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1940	1-104-665-11	ELECT	100uF	20.00%	25V
C1941	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1942	1-104-665-11	ELECT	100uF	20.00%	25V
C1943	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1944	1-104-665-11	ELECT	100uF	20.00%	25V
C1947	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1948	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1949	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1950	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1951	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1952	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1953	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1954	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1955	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1956	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1957	1-126-942-61	ELECT	1000uF	20.00%	25V
C1958	1-126-942-61	ELECT	1000uF	20.00%	25V
C1959	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1960	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1961	1-126-964-11	ELECT	10uF	20.00%	50V
C1962	1-126-964-11	ELECT	10uF	20.00%	50V
		< CONNECTOR >			
CN1801	1-506-468-11	PIN, CONNECTOR 3P			
* CN1802	1-564-506-11	PLUG, CONNECTOR 3P			
* CN1814	1-564-243-11	PIN, CONNECTOR 6P			
* CN1903	1-564-915-11	PIN, CONNECTOR 7P			
* CN1904	1-564-243-11	PIN, CONNECTOR 6P			
* CN1905	1-564-243-11	PIN, CONNECTOR 6P			
* CN1906	1-564-242-00	PIN, CONNECTOR 5P			
CN1907	1-766-268-11	PIN, CONNECTOR (PC BOARD) 6P			
CN1908	1-766-269-11	PIN, CONNECTOR (PC BOARD) 7P			
CN1909	1-766-270-11	PIN, CONNECTOR (PC BOARD) 8P			
* CN1911	1-564-243-11	PIN, CONNECTOR 6P			
CN1920	1-766-266-11	PIN, CONNECTOR (PC BOARD) 4P			
		< DIODE >			
D1619	8-719-200-82	DIODE 11ES2			
D1620	8-719-200-82	DIODE 11ES2			
D1621	8-719-200-82	DIODE 11ES2			
D1622	8-719-200-82	DIODE 11ES2			
D1623	8-719-200-82	DIODE 11ES2			
D1624	8-719-200-82	DIODE 11ES2			
D1625	8-719-200-82	DIODE 11ES2			
D1626	8-719-200-82	DIODE 11ES2			
D1627	8-719-200-82	DIODE 11ES2			
D1628	8-719-200-82	DIODE 11ES2			
D1629	8-719-200-82	DIODE 11ES2			
D1630	8-719-200-82	DIODE 11ES2			
D1803	8-719-991-33	DIODE 1SS133T-77			
D1804	8-719-991-33	DIODE 1SS133T-77			
D1805	8-719-991-33	DIODE 1SS133T-77			
D1806	8-719-991-33	DIODE 1SS133T-77			
D1807	8-719-991-33	DIODE 1SS133T-77			
D1808	8-719-991-33	DIODE 1SS133T-77			
D1809	8-719-991-33	DIODE 1SS133T-77			
D1901	8-719-062-39	DIODE D4SBL20UF1			
D1902	8-719-062-39	DIODE D4SBL20UF1			
D1903	8-719-991-33	DIODE 1SS133T-77			
D1904	8-719-200-82	DIODE 11ES2			
D1905	8-719-200-82	DIODE 11ES2			
D1906	8-719-200-82	DIODE 11ES2			
D1907	8-719-200-82	DIODE 11ES2			
D1908	8-719-200-82	DIODE 11ES2			
D1909	8-719-200-82	DIODE 11ES2			
D1910	8-719-200-82	DIODE 11ES2			
D1911	8-719-200-82	DIODE 11ES2			
D1913	8-719-510-33	DIODE D2SBA20			
D1914	8-719-982-21	DIODE MTZJ-30C			
D1915	8-719-118-63	DIODE RD5.6F-T7B2			
D1916	8-719-200-82	DIODE 11ES2			
D1917	8-719-200-82	DIODE 11ES2			
D1918	8-719-200-82	DIODE 11ES2			
D1919	8-719-200-82	DIODE 11ES2			
		< FUSE >			
⚠F901	1-533-310-11	FUSE, GLASS CYLINDRICAL(DIA.5) 6.3A/125V			
⚠F902	1-533-310-11	FUSE, GLASS CYLINDRICAL(DIA.5) 6.3A/125V			
⚠F903	1-533-310-11	FUSE, GLASS CYLINDRICAL(DIA.5) 6.3A/125V			
⚠F904	1-533-310-11	FUSE, GLASS CYLINDRICAL(DIA.5) 6.3A/125V			
⚠F905	1-533-296-11	FUSE, GLASS CYLINDRICAL(DIA.5) 2A/125V			
⚠F906	1-533-296-11	FUSE, GLASS CYLINDRICAL(DIA.5) 2A/125V			
⚠F907	1-533-296-11	FUSE, GLASS CYLINDRICAL(DIA.5) 2A/125V			
⚠F908	1-533-296-11	FUSE, GLASS CYLINDRICAL(DIA.5) 2A/125V			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
		< IC >	
IC1604	8-759-708-08	IC NJM78L08A	
IC1802	8-759-111-68	IC uPC1237HA	
IC1904	8-759-605-00	IC M5F78M07L	
IC1905	8-759-678-02	IC SI-3120FA	
IC1906	8-759-678-02	IC SI-3120FA	
IC1907	8-759-604-35	IC M5F78M05L	
IC1908	8-759-678-03	IC SI-3033CA	
IC1909	8-759-604-35	IC M5F78M05L	
IC1910	8-759-678-02	IC SI-3120FA	
		< JACK >	
J1802	1-774-136-11	CONNECTOR, ROUND TYPE 6P (SPEAKER)	
		< COIL >	
L1801	1-420-872-00	COIL, AIR-CORE	
L1802	1-420-872-00	COIL, AIR-CORE	
L1803	1-420-872-00	COIL, AIR-CORE	
		< TRANSISTOR >	
Q1801	8-729-029-40	TRANSISTOR DTA124ESA	
Q1802	8-729-116-57	TRANSISTOR 2SB1068-K	
Q1803	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q1901	8-729-116-57	TRANSISTOR 2SB1068-K	
		< RESISTOR >	
R1802	1-249-433-11	CARBON 22K 5%	1/4W
R1803	1-249-425-11	CARBON 4.7K 5%	1/4W F
R1804	1-249-421-11	CARBON 2.2K 5%	1/4W F
R1805	1-249-441-11	CARBON 100K 5%	1/4W
R1806	1-249-441-11	CARBON 100K 5%	1/4W
R1807	1-249-429-11	CARBON 10K 5%	1/4W
R1808	1-249-428-11	CARBON 8.2K 5%	1/4W F
R1809	1-249-435-11	CARBON 33K 5%	1/4W
R1810	1-249-417-11	CARBON 1K 5%	1/4W F
R1812	1-249-421-11	CARBON 2.2K 5%	1/4W F
R1813	1-249-425-11	CARBON 4.7K 5%	1/4W F
R1814	1-249-441-11	CARBON 100K 5%	1/4W
R1816	1-249-389-11	CARBON 4.7 5%	1/4W F
R1817	1-249-389-11	CARBON 4.7 5%	1/4W F
R1818	1-249-389-11	CARBON 4.7 5%	1/4W F
R1819	1-247-887-00	CARBON 220K 5%	1/4W
R1820	1-249-429-11	CARBON 10K 5%	1/4W
R1821	1-247-887-00	CARBON 220K 5%	1/4W
R1822	1-249-429-11	CARBON 10K 5%	1/4W
R1824	1-260-292-11	CARBON 1 5%	1/2W
R1825	1-249-437-11	CARBON 47K 5%	1/4W
R1826	1-249-437-11	CARBON 47K 5%	1/4W
R1827	1-249-437-11	CARBON 47K 5%	1/4W
R1828	1-249-437-11	CARBON 47K 5%	1/4W
R1829	1-249-437-11	CARBON 47K 5%	1/4W
R1830	1-249-437-11	CARBON 47K 5%	1/4W
⚠R1901	1-212-934-00	FUSIBLE 1 5%	1/2W
⚠R1902	1-212-934-00	FUSIBLE 1 5%	1/2W
R1905	1-247-843-11	CARBON 3.3K 5%	1/4W
R1906	1-249-437-11	CARBON 47K 5%	1/4W

Ref. No.	Part No.	Description	Remarks
R1907	1-249-437-11	CARBON 47K 5%	1/4W
R1908	1-260-292-11	CARBON 1 5%	1/2W
R1909	1-260-292-11	CARBON 1 5%	1/2W
R1923	1-249-381-11	CARBON 1 5%	1/4W F
R1924	1-249-381-11	CARBON 1 5%	1/4W F
R1925	1-249-425-11	CARBON 4.7K 5%	1/4W F
R1926	1-249-425-11	CARBON 4.7K 5%	1/4W F
R1927	1-249-425-11	CARBON 4.7K 5%	1/4W F
R1928	1-249-425-11	CARBON 4.7K 5%	1/4W F
R1930	1-249-425-11	CARBON 4.7K 5%	1/4W F
		< TERMINAL >	
TM1801	1-694-701-11	TERMINAL BOARD (SPEAKER)	

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Ref. No.	Part No.	Description	Remarks
	A-4473-117-A	REG BOARD, COMPLETE ********************	
		< CAPACITOR >	
C1812	1-136-165-00	MYLAR 0.1uF 5.00%	50V
C1813	1-136-165-00	MYLAR 0.1uF 5.00%	50V
		< CONNECTOR >	
* CN1807	1-564-518-11	PLUG, CONNECTOR 3P	
		< IC >	
IC1803	8-759-605-01	IC M5F78M18L	

****

Ref. No.	Part No.	Description	Remarks
	1-675-726-11	SENSOR BOARD *************	
		< CONNECTOR >	
CN708	1-506-481-11	PIN, CONNECTOR 2P	
		< DIODE >	
D704	8-719-055-84	DIODE GL-528VS1	
		< RESISTOR >	
R711	1-249-415-11	CARBON 680 5%	1/4W F

****

Ref. No.	Part No.	Description	Remarks
	1-675-727-11	SENSOR2 BOARD ***************	
	4-964-461-02	HOLDER(SENSOR)	
		< TRANSISTOR >	
Q703	8-729-926-31	PHOTO PT483F1S	

****

Ref. No.	Part No.	Description	Remarks
	A-4473-116-A	STBY BOARD, COMPLETE *********************	
	1-533-313-11	HOLDER, FUSE	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
		< CAPACITOR >			
⚠C1912	1-136-153-00	FILM	0.01uF	5%	50V
C1915	1-136-153-00	FILM	0.01uF	5%	50V
C1925	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C1926	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C1927	1-126-942-61	ELECT	1000uF	20.00%	25V
C1933	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C1934	1-104-665-11	ELECT	100uF	20.00%	25V
		< CONNECTOR >			
CN1901	1-564-321-00	PIN, CONNECTOR 2P			
* CN1902	1-565-792-11	PIN, CONNECTOR 2P			
		< DIODE >			
D1920	8-719-200-82	DIODE 11ES2			
D1921	8-719-200-82	DIODE 11ES2			
D1922	8-719-200-82	DIODE 11ES2			
D1923	8-719-200-82	DIODE 11ES2			
D1926	8-719-991-33	DIODE 1SS133T-77			
		< FUSE >			
⚠F909	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) 5A/125V			
		< IC >			
IC1903	8-759-158-62	IC TA78057S			
		< TRANSISTOR >			
Q1902	8-729-119-79	TRANSISTOR 2SC2785-FEK			
		< RESISTOR >			
R1911	1-215-910-00	METAL OXIDE	68	5%	3W
R1912	1-249-437-11	CARBON	47K	5%	1/4W
R1913	1-249-425-11	CARBON	4.7K	5%	1/4W F
⚠R1916	1-202-725-00	SOLID	3.3M	10%	1/2W
		< RELAY >			
⚠RY1901	1-755-276-11	RELAY, POWER			
		< TRANSFORMER >			
⚠T1901	1-433-758-11	TRANSFORMER, POWER			

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A-4473-110-A S-VIDEO BOARD, COMPLETE

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Ref. No.	Part No.	Description			Remarks
		< CAPACITOR >			
C1118	1-126-964-11	ELECT	10uF	20.00%	50V
C1119	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1120	1-126-964-11	ELECT	10uF	20.00%	50V
C1121	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1122	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1123	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1124	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1125	1-104-665-11	ELECT	100uF	20.00%	16V
C1126	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1128	1-104-665-11	ELECT	100uF	20.00%	16V
C1129	1-104-665-11	ELECT	100uF	20.00%	16V
C1130	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1131	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1132	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1133	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1134	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1135	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1136	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1137	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1139	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1143	1-126-964-11	ELECT	10uF	20.00%	50V
C1144	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1145	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1148	1-126-964-11	ELECT	10uF	20.00%	50V
C1149	1-126-964-11	ELECT	10uF	20.00%	50V
		< CONNECTOR >			
CN1101	1-779-275-11	CONNECTOR, FFC(LIF(NON-ZIF))7P			
CN1812	1-695-092-11	SOCKET, CONNECTOR 7P			
* CN1813	1-568-850-11	SOCKET, CONNECTOR 7P			
		< IC >			
IC1102	8-759-710-29	IC NJM2235M			
IC1103	8-759-710-29	IC NJM2235M			
IC1104	8-759-663-94	IC LA7106M-TLM			
		< JACK >			
J1104	1-794-334-11	CONNECTOR, (S) VIDEO (JACK) (VIDEO/AUX INPUT)			
J1105	1-794-333-11	CONNECTOR, (S) VIDEO (JACK) (MONITOR OUT)			
		< COIL >			
L1101	1-412-953-11	INDUCTOR	15uH		
L1102	1-412-953-11	INDUCTOR	15uH		
L1103	1-412-953-11	INDUCTOR	15uH		
L1104	1-412-951-11	INDUCTOR	10uH		
L1105	1-412-951-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1101	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1805	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q1806	8-729-027-59	TRANSISTOR DTC144EKA-T146			
		< RESISTOR >			
R1104	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1110	1-216-021-00	METAL CHIP	68	5%	1/10W
R1111	1-216-021-00	METAL CHIP	68	5%	1/10W
R1112	1-216-021-00	METAL CHIP	68	5%	1/10W
R1113	1-216-021-00	METAL CHIP	68	5%	1/10W
R1114	1-216-021-00	METAL CHIP	68	5%	1/10W
R1115	1-216-021-00	METAL CHIP	68	5%	1/10W
R1116	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1117	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1118	1-216-073-00	METAL CHIP	10K	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
R1119	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1120	1-216-295-91	SHORT	0		
R1121	1-216-042-00	METAL CHIP	510	5%	1/10W
R1122	1-216-042-00	METAL CHIP	510	5%	1/10W
R1123	1-216-042-00	METAL CHIP	510	5%	1/10W
R1126	1-216-045-00	METAL CHIP	680	5%	1/10W
R1137	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1138	1-216-073-00	METAL CHIP	10K	5%	1/10W

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A-4724-940-A TK BOARD, COMPLETE

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< CAPACITOR >

Ref. No.	Part No.	Description			Remarks
C004	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C005	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C006	1-124-779-00	ELECT CHIP	10uF	20%	16V
C007	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C008	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C009	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C010	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C011	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C012	1-124-779-00	ELECT CHIP	10uF	20%	16V
C013	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C014	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C015	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C016	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C017	1-164-172-11	CERAMIC CHIP	0.0056uF	10.00%	25V
C018	1-164-739-11	CERAMIC CHIP	560PF	5.00%	50V
C019	1-164-172-11	CERAMIC CHIP	0.0056uF	10.00%	25V
C020	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C021	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C022	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C023	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C024	1-164-730-11	CERAMIC CHIP	0.0012uF	10.00%	50V
C025	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C026	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C027	1-164-217-11	CERAMIC CHIP	150PF	5.00%	50V
C028	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C029	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C030	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C031	1-124-779-00	ELECT CHIP	10uF	20%	16V
C032	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C033	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C034	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C035	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C036	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C037	1-164-739-11	CERAMIC CHIP	560PF	5.00%	50V
C038	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C039	1-107-826-91	CERAMIC CHIP	0.1uF	10.00%	16V
C040	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C041	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V

< CONNECTOR >

Ref. No.	Part No.	Description	Remarks
CN001	1-573-363-21	CONNECTOR, FFC/FPC 23P	
CN002	1-566-529-11	CONNECTOR, FPC (ZIF) 13P	
CN003	1-784-870-21	CONNECTOR,FFC(LIF(NON-ZIF))18P	
CN004	1-784-870-21	CONNECTOR,FFC(LIF(NON-ZIF))18P	

< DIODE >

Ref. No.	Part No.	Description	Remarks
D003	8-719-073-01	DIODE MA111-(K8).S0	

< IC >

Ref. No.	Part No.	Description	Remarks
IC001	8-759-567-24	IC SSI33P3722	

< COIL >

Ref. No.	Part No.	Description	Remarks
L001	1-412-031-11	INDUCTOR CHIP 47uH	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remarks
Q001	8-729-903-46	TRANSISTOR 2SB1132-P	
Q002	8-729-015-76	TRANSISTOR UN5211	

< RESISTOR >

Ref. No.	Part No.	Description			Remarks
R001	1-216-815-11	METAL CHIP	330	5%	1/16W
R002	1-216-809-11	METAL CHIP	100	5%	1/16W
R003	1-216-809-11	METAL CHIP	100	5%	1/16W
R004	1-216-837-11	METAL CHIP	22K	5%	1/16W
R005	1-216-013-00	METAL CHIP	33	5%	1/10W
R006	1-216-013-00	METAL CHIP	33	5%	1/10W
R007	1-216-841-11	METAL CHIP	47K	5%	1/16W
R008	1-216-797-11	METAL CHIP	10	5%	1/16W
R009	1-216-834-11	METAL CHIP	12K	5%	1/16W
R010	1-216-833-91	RES-CHIP	10K	5%	1/16W
R012	1-216-864-11	METAL CHIP	0	5%	1/16W
R014	1-216-864-11	METAL CHIP	0	5%	1/16W
R015	1-216-833-91	RES-CHIP	10K	5%	1/16W
R016	1-216-833-91	RES-CHIP	10K	5%	1/16W
R017	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R018	1-216-833-91	RES-CHIP	10K	5%	1/16W
R022	1-216-811-11	METAL CHIP	150	5%	1/16W
R023	1-216-820-11	METAL CHIP	820	5%	1/16W
R025	1-216-813-11	METAL CHIP	220	5%	1/16W
R026	1-216-864-11	METAL CHIP	0	5%	1/16W
R029	1-216-861-11	METAL CHIP	2.2M	5%	1/16W

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A-4473-114-A THERMO BOARD, COMPLETE

****

< CAPACITOR >

Ref. No.	Part No.	Description			Remarks
C1814	1-165-319-11	CERAMIC CHIP	0.1uF		50V

< IC >

Ref. No.	Part No.	Description	Remarks
IC1804	8-759-512-73	IC LM35DZ-SL162025	

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A-4473-109-A VIDEO BOARD, COMPLETE

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< CAPACITOR >

Ref. No.	Part No.	Description			Remarks
C1113	1-126-964-11	ELECT	10uF	20.00%	50V
C1114	1-126-964-11	ELECT	10uF	20.00%	50V
C1115	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C1116	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1117	1-104-665-11	ELECT	100uF	20.00%	16V
C1147	1-126-964-11	ELECT	10uF	20.00%	50V

Ref. No.	Part No.	Description			Remarks
		< CONNECTOR >			
CN1809	1-695-092-11	SOCKET, CONNECTOR 7P			
		< IC >			
IC1101	8-759-710-29	IC NJM2235M			
		< JACK >			
J1102	1-794-332-11	JACK, PIN 2P (VIDEO/AUX INPUT)			
J1103	1-794-331-11	JACK, PIN 1P (MONITOR OUT)			
		< RESISTOR >			
R1105	1-216-021-00	METAL CHIP	68	5%	1/10W
R1106	1-216-021-00	METAL CHIP	68	5%	1/10W
R1107	1-216-021-00	METAL CHIP	68	5%	1/10W
R1108	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1109	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

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	A-4473-113-A	V-CONNECT BOARD, COMPLETE **************************	
		< CONNECTOR >	
CN1810	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P	
CN1811	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P	

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		MISCELLANEOUS **************	
66	1-792-580-11	CORD(WITH CONNECTOR)	
⚠160	1-783-531-61	CORD, POWER	
⚠285	8-820-081-09	OPTICAL PICK-UP BLOCK KHM-220AAA	
FAN101	1-698-997-11	FAN, D.C. (DVD)	
FAN371	1-698-792-11	FAN, DC (AMP)	
M701	X-4950-341-1	MOTOR (CLAMP) ASSY	
M702	X-4950-342-1	MOTOR (LOADING) ASSY	
S707	1-418-045-11	ENCODER, ROTARY	
SP401	1-529-670-11	SPEAKER (20cm)	
SP501	1-529-671-11	SPEAKER (10cm)	
SP502	1-529-673-11	SPEAKER (2.5cm)	
SP601	1-529-673-11	SPEAKER (2.5cm)	
SP602	1-529-672-11	SPEAKER (8cm)	
⚠T900	1-435-480-11	TRANSFORMER, POWER	

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Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS *******************************	
	1-418-924-11	COMMANDER, STANDARD (RM-PP900)	
	1-754-147-11	ANTENNA (FM)	
	1-754-149-11	LOOPANT (AM)	
	1-769-108-11	CORD,CONNECTION (VIDEO)	
	1-792-629-11	LEAD(WITH CONNECTOR)	
	1-792-760-11	CORD,CONNECTION (SPEAKER CORD (10 m))	
	1-792-761-11	CORD,CONNECTION (SPEAKER CORD (2.5 m))	
	1-792-762-11	CORD,CONNECTION (PIN CORD (AUDIO 1.5 m))	
	4-219-989-01	BRACKET, HOOK	
	4-229-802-11	MANUAL, INSTRUCTION (ENGLISH)	
	4-874-614-61	SCREW +BVTP 3.5X16	
	4-983-536-31	COVER,BATTERY(for RM-PP900)	

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		************** HARDWARE LIST **************	
#1	7-685-887-09	SCREW +BVTT 4X25 (S)	
#2	7-685-661-79	SCREW +P 4X12 TYPE2 NON-SLIT	
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#5	7-685-881-09	SCREW +BVTT 4X8 (S)	
#6	7-685-663-79	SCREW +P 4X16 TYPE2 NON-SLIT	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2000.06	New
1.1	2002.01	Addition of Ref. No. #2 in exploded views (SPM-02001)
1.2	2002.06	Correction of Part No. for Ref. No.54 and 303 (SPM-02036)